

2006

**Missouri MC+ Managed  
Care Program**

**External Quality Review**

**Report of Findings**

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## LIST OF ACRONYMS

<b>BA+</b>	Blue-Advantage Plus of Kansas City
<b>BHO</b>	Behavioral Health Management Organization
<b>CAHPS</b>	Consumer Assessment of Health Plans Survey
<b>CCP</b>	Community CarePlus
<b>CDC</b>	Centers for Disease Control and Prevention
<b>Chi-square</b>	A statistical test that is used to examine the probability of a change or difference in rates is due to chance.
<b>CI</b>	Confidence Interval
<b>CMFHP</b>	Children's Mercy Family Health Partners
<b>CMHC</b>	Community Mental Health Center
<b>CMS</b>	Centers for Medicare and Medicaid Services, U.S. Department of Health and Human Services
<b>CPT</b>	Current Procedural Terminology
<b>CY</b>	Calendar Year
<b>DHHS</b>	U.S. Department of Health and Human Services
<b>DHSS</b>	Missouri Department of Health and Senior Services
<b>DMS</b>	Division of Medical Services
<b>DSS</b>	Missouri Department of Social Services
<b>EPSDT</b>	Early, Periodic Screening, Diagnosis and Treatment
<b>EQR</b>	External Quality Review
<b>EQRO</b>	External Quality Review Organization
<b>FFS</b>	Fee-for-Service
<b>FG</b>	FirstGuard Health Plan
<b>HCUSA</b>	HealthCare USA
<b>HCY</b>	Healthy Children and Youth, the Missouri Medicaid EPSDT program



<b>HEDIS</b>	Health Plan Employer Data and Information Set
<b>HHP</b>	Harmony Health Plan of Missouri
<b>HIPAA</b>	Health Insurance Portability and Accountability Act
<b>HIS</b>	Health Information Systems
<b>HMO</b>	Health Maintenance Organization
<b>ICD-9</b>	International Classification of Diseases, Ninth Revision, Clinical Modification, World Health Organization
<b>ICN</b>	Internal Control Number
<b>ISCA</b>	Information Systems Capability Assessment
<b>LPHA</b>	Local Public Health Agency
<b>MBE</b>	Minority-owned Business Enterprise
<b>MC+</b>	The name of the Missouri Medicaid Program for families, children, and pregnant women.
<b>MC+ MCOs</b>	Missouri Medicaid Program Managed Care Organizations
<b>MCO</b>	Managed Care Organization
<b>MCP</b>	Mercy CarePlus
<b>MDI</b>	Missouri Department of Insurance
<b>MHP</b>	Mercy MC+
<b>MMIS</b>	Medicaid Management Information System
<b>MOHSAIC</b>	Missouri Health Strategic Architectures and Information Cooperative, Missouri Department of Health and Senior Services Public Health Immunization Registry
<b>NCPDP</b>	National Council for Prescription Drug Program
<b>NCQA</b>	National Committee for Quality Assurance
<b>N.S.</b>	Not significant, indicating that a statistical test does not result in the ability to conclude that a real effect exists.
<b>NSF/CMS 1500</b>	National Standard Format/ Center for Medicare and Medicaid Services Form 1500
<b>PCP</b>	Primary Care Provider



<b>PIHP</b>	Prepaid Inpatient Health Plan
<b>PIP</b>	Performance Improvement Project
<b>PRO</b>	Peer Review Organization
<b>QA &amp; I</b>	Quality Assessment and Improvement Advisory Group
<b>QI/UM Coordinator</b>	Quality Improvement/Utilization Management Coordinator.
<b>SMA</b>	State Medicaid Agency, the Missouri Department of Social Services, Division of Medical Services
<b>SPHA</b>	State Public Health Agency, the Missouri Department of Health and Senior Services
<b>UB-92</b>	Universal Billing Form 92



## GLOSSARY AND OPERATIONAL DEFINITIONS

<b>Administrative Method</b>	The Administrative Method of calculating HEDIS Performance Measures requires the MCO to identify the denominator and numerator using transaction data or other administrative databases. The Administrative Method outlines the collection and calculation of a measure using only administrative data, including a description of the denominator (i.e., the entire eligible population), the numerator requirements (i.e., the indicated treatment or procedure) and any exclusion(s) allowed for the measure.
<b>Accuracy (Match) Rate</b>	The ratio of identical or correct information in the medical record and the SMA relative to the number of encounters that took place.
<b>Accuracy of a data field</b>	The extent to which an encounter claim field contains the correct type of information (e.g., numeric, alpha, alpha numeric) in the proper format (e.g., mm/dd/yyyy for date field).
<b>Accuracy of the State encounter claims database</b>	The extent to which encounters are being submitted for 100 percent of the services that are provided. <sup>1</sup>
<b>Commission (or surplus encounter claim)</b>	An encounter that is represented in the SMA encounter claims database but not the medical record; or a duplicate encounter.
<b>Completeness of a data field</b>	The extent to which an encounter claim field contains data (either present or absent).
<b>Confidence interval or level</b>	The range of accuracy of a population estimate obtained from a sample.

<sup>1</sup> Medstat (1999). A Guide for States to Assist in the Collection and Analysis of Medicaid Managed Care Data: Second Edition

<b>Encounter data</b>	“Encounter data are records of health care services that have been provided to patients.” <sup>2</sup>
<b>Error</b>	An error in coding or recording an encounter claim.
<b>Fault (Error) Rate</b>	The ratio of missing and erroneous records relative to the total number of encounters that took place <sup>3</sup> . The rate at which the SMA encounter claims data does not match the medical record or the MCO paid encounter claims data (the converse of match rate).
<b>Hybrid Method</b>	Hybrid Method requires the MCO to identify the numerator through both administrative and medical record data. The MCO reports a rate based on members in the sample who are found through either administrative or medical record data to have received the service identified in the numerator.
<b>Interrater reliability (IRR)</b>	A method of addressing the internal validity of a study by ensuring that data are collected in a consistent manner across data collectors.
<b>Omission (or missing encounter claim)</b>	An encounter that occurred but is not represented in the State encounter claims database.
<b>Paid claim</b>	An encounter claim that has been paid by the MCO.

<sup>2</sup> Medstat (1999).: A Guide for States to Assist in the Collection and Analysis of Medicaid Managed Care Data. Medstat: Santa Barbara. Second Edition

<sup>3</sup> Centers for Medicare and Medicaid Services (2002). Validating Encounter Data: A protocol for use in conducting Medicaid External Quality Review activities, Final Protocol, Version 1.0, U.S. Department of Health and Human Services.



<b>Probability sample</b>	A sample in which every element in the sampling frame has a known, non-zero probability of being included in a sample. This produces unbiased estimates of population parameters that are linear functions of the observations from the sample data <sup>4</sup> .
<b>Random sample</b>	Selection of sampling units from a sampling frame where each unit has an equal probability of selection.
<b>Reasonableness of a data field</b>	The extent to which an encounter claim field represents a valid value (e.g., an actual procedure code, actual birth date); also referred to as validity of the data.
<b>Reliability</b>	The consistency of findings across time, situations, or raters.
<b>Sampling frame</b>	The population of potential sampling units that meet the criteria for selection (e.g., Medical encounter claim types from January 1, 2004 through March 31, 2004).
<b>Sampling unit</b>	Each unit in the sampling frame (e.g., an encounter).
<b>Simple sample</b>	Selection of sampling units from one sampling frame.
<b>Unpaid claim</b>	All unpaid and denied claims from the MCO; All claims not paid by the MCO either through capitation or through other payment methodology.

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<sup>4</sup> Levy, P.S., Lemeshow, S. (1999). Sampling of Populations: Methods and Applications, Third Edition. John Wiley and Sons: New York.

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## I.0 EXECUTIVE SUMMARY



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## I.1 Introduction

The United States Department of Health and Human Services (DHHS), Centers for Medicare and Medicaid Services (CMS) requires an annual, independent external evaluation of State Medicaid Managed Care programs by an External Quality Review Organization (EQRO). External Quality Review is the analysis and evaluation by an approved EQRO of aggregate information on quality, timeliness, and access to health care services furnished by Managed Care Organizations (MCOs) and their contractors to recipients of Medicaid managed care services. The Centers for Medicare and Medicaid Services (42 CFR §433 and §438; Medicaid Program, External Quality Review of Medicaid Managed Care Organizations) rule specifies the requirements for evaluation of Medicaid managed care programs. The present report summarizes the findings of the third year of implementation of the mandatory activities for External Quality Review of the MC+ Managed Care Program in Missouri as conducted by Behavioral Health Concepts, Inc., a PRO-Like Entity certified by CMS to conduct External Quality Review (EQR) in all U.S. states and territories.

The State of Missouri contracts with the following MCOs represented in this report:

- Mercy CarePlus (MCP)
- HealthCare USA (HCUSA)
- Missouri Care (MOCare)
- Children's Mercy Family Health Partners (CMFHP)
- Blue-Advantage Plus of Kansas City (BA+)

The following MCOs are featured in this report, however contracts with the State of Missouri did not exist with these MCOs for the entire period covered in this report:

- Harmony Health Plan of Missouri (HHP)
- FirstGuard Health Plan (FG)

The EQR technical report analyzes and aggregates data from three mandatory EQR activities and one optional activity as described below:

### I) **Validating Performance Improvement Projects<sup>5</sup>**

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<sup>5</sup> Department of Health and Human Services. Centers for Medicare and Medicaid Services (2002). Validating Performance Improvement Projects: A protocol for use in Conducting Medicaid External Quality Review Activities, Final Protocol, Version 1.0, May 1, 2002. Washington, D.C.: Author.

Each MC+ MCO conducted performance improvement projects (PIPs) during the 12 months preceding the audit; two of these PIPs were validated through a combination of self-selection and EQRO review. The final selection of PIPs to be audited was determined by the State Medicaid Agency (SMA; Missouri Department of Social Services, DMS; Division of Medical Services).

**2) Validating Performance Measures<sup>6</sup>**

The three performance measures validated were HEDIS 2006 measures of Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life, Follow-Up After Hospitalization for Mental Illness, and Prenatal and Postpartum Care.

**3) Validating Encounter Data<sup>7</sup> (optional activity)**

Validation of Encounter Data examined the completeness, accuracy, and reliability of specific fields in the SMA database; and the extent to which paid claims in the SMA were represented in the medical records of MC+ Managed Care Members; and

**4) MCO Compliance with Managed Care Regulations.<sup>8</sup>**

The EQRO conducted all protocol activities, with the exception of the MCO Compliance with Managed Care Regulations Protocol. The SMA conducted these activities and requested the EQRO to review them (Compliance Review Analysis).

## I.2 Preparation for the 2006 External Quality Review

### PREPARATION WITH THE STATE MEDICAID AGENCY

Effective July 1, 2006 the State of Missouri contract for the External Quality Review of the MC+ Managed Care Program (State of Missouri Contract No: C306122001, Amendment No.: 003) was revised to comply with federal requirements for states to contract with an external, independent entity to implement the mandatory protocols for External Quality Review. The first monthly meeting for planning the scope of work, technical methods and objectives, and analyses was held by the SMA on October 11, 2006. Meetings were held with the SMA and the EQRO on December 13,

<sup>6</sup> Department of Health and Human Services. Centers for Medicare and Medicaid Services (2002). Validating Performance Measures: A protocol for use in Conducting Medicaid External Quality Review Activities, Final Protocol, Version 1.0, May 1, 2002. Washington, D.C.: Author.

<sup>7</sup> Department of Health and Human Services. Centers for Medicare and Medicaid Services (2002). Validating Encounter Data: A protocol for use in Conducting Medicaid External Quality Review Activities, Final Protocol, Version 1.0, May 1, 2002. Washington, D.C.: Author.

<sup>8</sup> Department of Health and Human Services. Centers for Medicare and Medicaid Services (2003). Monitoring Medicaid Managed Care Organizations (MCOs) and Prepaid Inpatient Health Plans (PIHPs): A protocol for determining compliance with Medicaid Managed Care Proposed Regulations at 42 CFR §400, 430, et al., Final Protocol, Version 1.0, February 11, 2003. Washington, D.C.: Author.

2006, January 10, 2007, March 14, 2007, June 20, 2007 and August 27, 2007. Additional meetings and teleconference calls were conducted as needed between SMA and EQRO personnel.

At the first meeting in October 2006, the previous years' report was discussed and the plan for the 2006 audit was discussed. During the month of October, the EQRO clarified the SMA's objectives for each of the protocols, developed data requests, prepared detailed proposals for the implementation and analysis of data for each protocol, and prepared materials for SMA review. Written proposals for each protocol were submitted on October 11, 2006 by the EQRO for review, discussion, revision, and approval. By December 2006, the EQRO had negotiated with the SMA the data request for State encounter data to be validated. All protocols were revised, finalized and submitted to the SMA by October 2006.

### **PREPARATION OF MC+ MCOs**

During October 2006, preparation of MC+ MCOs for the implementation of the 2006 EQR was conducted by the EQRO Project Director and personnel. To begin, the EQRO Project Director presented a timeline for project implementation and answered MCO questions at the October 25, 2006 QA&I Committee Meeting and the October 26, 2006 MC+ Managed Care All-Plan Meeting. The EQRO Project Director and personnel then conducted orientation to the protocols and the EQR processes with each MC+ MCO.

The EQRO Assistant Project Director arranged the dates of the teleconference calls with MC+ MCO QI/UM Coordinators or Medicaid Plan Administrators. A detailed presentation, tentative list of data requests, and the proposals approved by the SMA were sent to MC+ MCOs prior to the teleconference orientation sessions. MC+ MCOs were requested to have all personnel involved in fulfilling the requests or in implementing activities related to the protocols (e.g., performance improvement projects to be validated, performance measures to be validated, encounter data requested) present at the teleconference calls. [The orientation presentation is contained in Appendix I.] An SMA representative attended all conference calls and received minutes of the meetings taken by the EQRO upon completion of all the calls. Conference calls with EQRO and MC+ MCO personnel occurred between November 7, 2006 and November 15, 2006. To avoid confusion and the inundation of multiple requests at once, the requests for information from MC+ MCOs were implemented in a staged approach from December 1, 2006 through May 4, 2007. All communications (letters, general and specific instructions) were submitted for review, revision, and approval by the SMA prior to sending them to the MC+ MCOs.

## DEVELOPMENT OF WORKSHEETS, TOOLS, AND RATING CRITERIA

The EQRO Project Director, Research Associate, Assistant Project Director, and a healthcare provider were responsible for modifying the worksheets and tools used by the EQRO during the 2005 audit. The EQRO Assistant Project Director revised the worksheet (Attachment B) of the Validating Performance Improvement Project Protocol to add detail for several items that were specific to the MC+ Managed Care Program.

For the Validating Encounter Data Protocol, the EQRO Project Director revised both the data analytic plan in collaboration with the SMA as well as methods and procedures based on the content, quality and format of data provided by the SMA and MC+ MCOs. The SMA selected the fields to validate for completeness, accuracy, and reliability of paid claims submitted by MC+ MCOs. The EQRO developed definitions of all field parameters for review, revision, and approval by the SMA. Encounter data critical field parameters were approved by the SMA at the December 13, 2006 meeting between the SMA and the EQRO.

The Validating Performance Measures Protocol worksheets were revised and updated by the EQRO Project Director and Research Associate to reflect the Performance Measures selected for review for HEDIS 2006. The worksheets had been developed by Behavioral Health Concepts, Inc. staff during the previous year's audit.

The SMA had already conducted the activities of the MC+ MCO Compliance with Managed Care Regulations Protocol through the state contract compliance monitoring process and the work of the EQRO involved the review and evaluation of this information (see Medicaid Program; External Quality Review of Medicaid Managed Care Organizations of 2003, CFR §438.58). The state contract for EQRO requires the review of SMA's activities with regard to the Protocol, however, additional policies and documents were requested prior to and during the on-site visits with MC+ MCOs when information was incomplete or unclear. To facilitate the review of compliance with federal regulations, the EQRO Assistant Project Director revised a previously developed cross-walk between the SMA contract requirements for Medicaid managed care and the federal Medicaid Managed Care Regulations.

The MC+ Managed Care Program consultant, who has participated in the EQRO for the past six years, reviewed and refined the tool. Feedback on inconsistencies between the Medicaid Managed



Care contract and federal requirements was provided immediately to the SMA. The EQRO utilized the rating system developed during the 2004 audit to provide ratings for each MCOs' compliance. The SMA provided state compliance review information to the EQRO for all MC+ MCOs in February 2007. The EQRO staff and the consultant reviewed all available materials and met with SMA staff on February 21, 2007 to clarify SMA comments and compliance ratings; and identify issues for follow-up at site visits. Updates on MC+ MCO compliance were provided through early July 2007 to ensure that the EQRO had up-to-date information prior to the beginning of the on-site reviews. Recommended ratings were provided to SMA on March 14, 2007, which were approved for utilization in this report.

The following sections summarize the aggregate findings and conclusions for each of the mandatory protocols. The full report is organized according to each protocol and contains detailed descriptions of the technical methods, objectives, findings, and conclusions (strengths, areas for improvement, and recommendations). In addition, it provides MCO to MCO comparisons and individual MC+ MCO summaries for each protocol.

## I.3 Validation of Performance Improvement Projects

For the Validating Performance Improvement Projects (PIP) Protocol, the EQRO validated two PIPs for each MCO that were underway during the previous 12 month period at each MC+ MCO, for a total of 10 PIPs validated. Eligible PIPs for validation were identified by the MC+ MCOs, SMA, and the EQRO. The final selection of the PIPs for the 2006 validation process was made by the SMA in December 2006. PIPs are to be aimed at studying the effectiveness of clinical or non-clinical interventions, and should improve processes highly associated with healthcare outcomes, and/or healthcare outcomes themselves. They are to be carried out over multiple re-measurement periods to measure: 1) improvement; 2) the need for continued improvement; or 3) stability in improvement as a result of an intervention. Under the State contract for Medicaid Managed Care, MC+ MCOs are required to have two active PIPs, one of which is clinical in nature and one non-clinical. Specific feedback and technical assistance was provided to each MC+ MCO by the EQRO during the site visits for improving study methods, data collection, and analysis.

## ACCESS TO CARE

Access to care was an important theme addressed throughout all the PIP submissions reviewed. Specific PIPs attempted to impact the access to primary care physicians for members who used the emergency room as the means of obtaining medical services (Mercy CarePlus and Children's Mercy Family Health Partners). Two MC+MCO focused on education and support to obtain appropriate medications for the treatment of asthma (Mercy CarePlus and Missouri Care). All the projects reviewed used the format of the PIP to improve access to care for members. Three of the projects clearly focused on ensuring the members had adequate and timely access to services after being hospitalized for mental health related issues (HealthCare USA, Missouri Care, BA+). The on-site discussions with MC+ MCO staff indicate that they realize that improving access to care is an ongoing aspect of all projects that are developed.

## QUALITY OF CARE

Topic identification was an area that provided evidence of the attention to providing quality services to members. Intervention development for PIPs also focused on the issue of quality services. All PIPs reviewed focused on topics that needed improvement, either in the internal processes used to operate the MC+ MCO, or in the direct provision of services delivered. The corresponding interventions that address barriers to quality care and health outcomes were clearly evident in the narratives submitted, as well as in the discussions with MC+ MCOs during the on-site review. These interventions addressed key aspects of enrollee care and services, such as medication and treatment management; risk identification and stratification for various levels of care; monitoring provider access and quality services; and preventive care. These efforts exemplified an attention to quality healthcare services.

## TIMELINESS OF CARE

Timeliness of care was the major focus of a number of the PIPs reviewed. Three projects identified the need for timely aftercare for members who required inpatient hospitalization for mental illness (HealthCare USA, Missouri Care, and BA+). The remaining projects focused on subjects such as timely encounter data acceptance (HealthCare USA), appropriate medications and treatment for asthma (Mercy CarePlus, Missouri Care), improved access to primary care (CMFHP), and improved access to well-child visits in the first 15 months of life. All addressed the need for timely access to preventive and primary health care services. The MC+ MCOs all related their awareness of the

need to provide not only quality, but timely services to members. Projects reflected this awareness in that they addressed internal processes and direct service improvement.

## RECOMMENDATIONS

1. It is recommended that MC+ MCOs continue to refine their skills in the development and implementation of the Performance Improvement Projects. Improved training, assistance and expertise for the design, statistical analysis, and interpretation of PIP findings are available. One MC+ MCO (Children's Mercy Family Health Partners) utilized the services of a statistician from a local university to ensure valid and reliable findings.
2. In the design of PIPs, MC+ MCOs need to use generally accepted practices for program evaluation to conduct PIPs. In addition to training on the development of PIPs and on-site technical assistance, references to the CMS protocol, "Conducting Performance Improvement Projects" were recommended by the EQRO at each MC+ MCO as a guideline to frame the development, reporting and analysis of the PIP.
3. PIPs should be conducted on an ongoing basis, with at least quarterly measurement of some indices to provide data about the need for changes in implementation, data collection, or interventions.
4. PIPs that are not yet complete should include narrative reflecting next steps and the plan for how the PIP will be maintained and enhanced for future years.
5. It continues to be recommended that a statewide PIP be initiated by the SMA and the MC+ QA & I Group for planning and implementation one year prior to the planned implementation.
6. It appears that many MC+ MCOs conduct PIPs on an ongoing basis as part of their quality improvement program, continuing to utilize these PIPs as tools to improve the organization's ability to serve members will be beneficial.

## 1.4 Validation of Performance Measures

The Validating Performance Measures Protocol requires the validation or calculation of three performance measures at each MC+ MCO by the EQRO. The measures selected for validation by the SMA are required to be submitted by each MC+ MCO on an annual basis. The measures were also submitted by the State Public Health Agency (SPHA; Missouri Department of Health and Senior Services; DHSS) for all Health Maintenance Organizations (HMOs) operating in the State of Missouri. They were: 1) HEDIS 2006 Follow-Up After Hospitalization for Mental Illness; 2) HEDIS 2006 Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life ; and 3) HEDIS 2006 Prenatal and Postpartum Care. Detailed specifications for the calculation of these measures were developed by the National Committee for Quality Assurance (NCQA), a national accrediting organization for managed care organizations. The EQRO examined the information systems, detailed algorithms, MC+ MCO extract files, medical records, and data submissions provided to the

SPHA to conduct the validation activities of this protocol. The data reported to the SPHA was based on MC+ MCO performance during 2005.

## QUALITY OF CARE

The HEDIS 2006 Follow-Up After Hospitalization for Mental Illness measure is categorized as an Effectiveness of Care measure and is designed to measure the effectiveness/quality of care received by health plan members.

All five MC+ MCOs were substantially compliant with the specifications for calculation of this measure. Two MC+ MCOs reported rates that were higher than the National Medicaid Average for this measure.

## ACCESS TO CARE

The HEDIS 2006 Prenatal and Postpartum Care measure is categorized as an Access/Availability of Care measure and is designed to measure the level of access that health plan members receive to prenatal and postpartum care.

Three of the five MC+ MCOs were fully compliant with the specifications for calculation of this measure. One MC+ MCO reported a rate that was higher than the National Medicaid Average for this measure.

The HEDIS 2006 Prenatal and Postpartum Care measure was unable to be validated for one of the five MC+ MCOs and does not represent a valid measure of performance for the MC+ Managed Care Program.

## TIMELINESS OF CARE

The HEDIS 2006 Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life measure is categorized as an Use of Services measure and is designated to measure the timeliness of the care received.

Two of the five MC+ MCOs were fully compliant with the specifications for calculation of this measure. Two MC+ MCOs reported rates that were higher than the National Medicaid Average and the National Commercial Average for this measure.



The HEDIS 2006 Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life measure was unable to be validated for one of the five MC+ MCOs and does not represent a valid measure of performance for the MC+ Managed Care Program.

## RECOMMENDATIONS

1. For the calculation of the HEDIS Prenatal and Postpartum Care measure, the Hybrid Method should be required by the SMA to facilitate accurate and valid MC+ MCO comparisons and a valid statewide rate for comparison of performance with other states.
2. The SMA should encourage technical assistance regarding the calculation of HEDIS performance measures and medical record review processes for the calculation of performance measures.
3. The SMA should re-validate measures for which all MC+ MCOs were not Fully or Substantially Compliant on the calculation of measures and in order to determine the impact on contract performance.
4. MC+ MCOs with significantly lower rates of eligible members and administrative hits should closely examine the potential reasons for fewer members or claims identified. This may be due to member characteristics, but is more likely due to claims administration procedures and system characteristics such as the proportion of members receiving services from capitated providers. Identifying methods of improving administrative hits will improve the accuracy in calculating the measures.
5. The SMA should consider having the EQRO validate the calculation of at least one measure from year to year, for comparison and analysis of trend data.
6. MC+ MCOs should run query reports early enough in the HEDIS season so that they may effectuate change in rates where interventions could easily be implored.

## 1.5 Encounter Data Validation

Encounter claims data are used by SMAs to conduct rate setting and quality improvement evaluation. Before SMA encounter claims data can be used, it is necessary to establish the extent to which the data for critical fields (e.g., diagnosis and procedure codes, units and dates of service, member and provider identifiers) are complete (each field contains information), accurate (the information contained in each field is of the right size and type), and valid (the information represents actual dates or procedure and diagnosis codes). Several critical fields for each of six claim types (Medical, Dental, Home Health, Inpatient, Outpatient, Hospital, and Pharmacy) were identified by the SMA and examined by the EQRO for completeness, accuracy, and validity using an extract file from SMA paid encounter claims. To examine the extent to which the SMA encounter claims database was complete (the extent to which SMA encounter claims database represents all claims paid by MC+ MCOs); the level and consistency of services was evaluated by examining the

rate of each of six claim types. Additionally, the representativeness (or completeness) of the SMA encounter claims database was examined by comparing data in the SMA encounter claims database to the medical records of members. A random sample of medical records was used to compare the diagnosis codes, procedure codes, drug name dispensed, and drug quantity dispensed in the SMA encounter claims database with documentation in MC+ member medical records. The findings of these comparisons were used to determine the completeness of the SMA encounter claims database in regards to the medical records of members. The completeness of the SMA paid encounter claims was then compared with MC+ MCO records of paid and unpaid claims. This proved to be a difficult task, as all of the MC+ MCO data submissions did not include unique claim identifiers that could be used to accomplish this comparison. Although all five MC+ MCOs provided data in the format necessary to make the comparisons; the data did not include a unique identifier that could be utilized to match claims. The results obtained are detailed in the results of the Aggregate Encounter Data Validation section of this report.

## STRENGTHS

1. MC+ members are receiving more services than their fee-for-services counterparts. The claims data presented above details a much higher rate of claims per 1,000 members for MC+ members. This is likely due to a greater availability of needed services, more access points to care, and the timeliness in which those services are delivered.
2. All Dental and Pharmacy claim type fields examined were 100.00% complete, accurate and valid for all MC+ MCOs. The SMA encounter claims data critical fields examined for accepted and paid claims of this type are valid for analysis.
3. For all MC+ MCOs, the first Outpatient Diagnosis Code field was 100.0% complete, accurate and valid.
4. All MC+ MCOs submitted data in the format requested, and the EQRO was able to perform the analysis of paid and unpaid claims contained in the SMA database.
5. The examination of the level, volume, and consistency of services found significant variability between MC+ MCOs in the rate of each type of claim (Medical, Dental, Inpatient, Outpatient Hospital, Home Health, and Pharmacy), with no patterns of variation noted by MC+ Managed Care Region or type of MC+ MCO.
6. There were no unmatched “paid” encounters within all claim types (Inpatient, Outpatient, and Pharmacy) for all MCOs.
7. Unpaid claims represent less than .02% of all claims submitted to the SMA.

## AREAS FOR IMPROVEMENT

1. For all MC+ MCOs, all unmatched encounters were due to missing ICN numbers, which are required to match the encounter to that of the SMA.

2. For the Medical claim type, there were invalid values for the First Diagnosis Code fields, including blank fields.
3. The Procedure Code field in the Outpatient Home Health and Outpatient Hospital claim types included some invalid information. Most of this was due to blank fields.
4. The Inpatient claim type fields contained incomplete, invalid, and inaccurate fields.
5. The match rates between the SMA database and MC+ MCO medical records for claim type procedures were 76.63%, this is however a significant improvement over last year's match rate of 52.0%. Medical records that did not have procedure codes that matched the SMA encounter claims extract file were in error primarily due to missing or illegible information.
6. The match rates between the SMA database and MC+ MCO medical records for claim type procedures were 72.86%, this is significantly lower than last year's match rate of 99.01%. Medical records that did not have procedure codes that matched the SMA encounter claims extract file were in error primarily due to missing or illegible information.

## RECOMMENDATIONS

1. It is recommended that the SMA institute additional edits for the Medical, Inpatient and Outpatient Hospital claim types to edit claims with blank fields or dummy values (e.g., "000" and "99999999").
2. The SMA should continue to provide timely feedback to MC+ MCOs regarding the rate of acceptance of each claim type and the types of errors associated with rejected claims.
3. The MC+ MCO's medical record reviews should continue to be targeted toward validation of diagnosis and procedure codes.
4. The SMA should clarify the expectations for MC+ MCOs in the level of completeness, accuracy, and validity and which data fields are required (e.g., Diagnosis Code fields 2 through 5); provide timely feedback to MC+ MCOs when standards are not met; and develop corrective action plans when standards are not met within a reasonable amount of time established by the SMA.

## 1.6 MC+ MCO Compliance with Managed Care Regulations

The purpose of the protocol to monitor MCO Compliance with Managed Care Regulations is to provide an independent review of MC+ MCO activities and assess the outcomes of timeliness and access to the services provided by the MC+ MCOs. The protocol requires the utilization of two main sources of information to determine compliance with federal regulations. These sources of information are document review and interviews with MC+ MCO personnel. This combination of information was designed to provide the SMA with a better understanding of organizational performance at each MC+ MCO.

The policy and practice in the operation of each MC+ MCO was evaluated against the seventy (70) regulations related to operating a Medicaid managed care program. The regulations were grouped into three main categories: Enrollee Rights and Protections, Quality Assessment and Improvement,

and Grievance Systems. The category of Quality Assessment and Improvement was subdivided into three subcategories: Access Standards, Structure and Operation Standards, and Measurement and Improvement. Initially, the SMA reviewed each MC+ MCOs' policy to determine compliance with the requirements of the MC+ Medicaid Managed Care Contract. These determinations and their application to the requirements of the federal regulations were assessed by the EQRO. The EQRO also focused on follow up to the findings reported in the 2004 and 2005 reports by concentrating efforts of technical assistance and assessment on the items that were rated "Partially Met" or "Not Met" in those report years. Additional document review occurred when the MC+ MCO policy submission did not meet MC+ Medicaid Managed Care contract requirements, or where clarification was necessary. A set of interview questions specific to each MC+ MCO was developed to elicit information that validated organizational practice and explored issues not fully addressed in the documents.

## QUALITY OF CARE

Seven of the 13 regulations for Enrollee Rights and Protections were 100% "Met." Communicating MC+ Members' rights to respect, privacy, and treatment options, as well as communicating, orally and in writing, in their own language or with the provision of interpretive services is an area of strength for all MC+ MCOs. The MC+ MCOs communicated that meeting these requirements with members and providers, created an atmosphere with the expectation of delivering quality healthcare. The MC+ MCOs maintained an awareness of and appropriate response to cultural and language barriers concerning communication in obtaining healthcare. The MC+ MCOs responded to physical, emotional and cultural barriers experienced by members with diligence and creativity. The MC+ MCOs were aware of their need to provide quality services to members in a timely and effective manner.

## ACCESS TO CARE

Four of the MC+ MCOs were fully compliant with the 17 federal regulations concerning Access Standards. These included: provider networks; freedom of choice and access to all services; out-of-network services; timely access to care; care coordination; authorization of services; appropriate notifications; timeliness of decisions regarding care and emergency and post-stabilization services. The six MC+ MCOs monitored high risk MC+ Members and had active case management services in place. Each MC+ MCO described measures they used to identify and provide services to MC+ Members who have special healthcare needs. Many of these case management programs exceeded the strict requirements in the MC+ Medicaid Managed Care contract. All six MC+ MCOs could

describe efforts to participate in community events and forums to provide education to members regarding the use of PCPs, special programs available, and how to access their PCP and other specialist service providers that might be required. The MC+ MCOs were crucially aware of their responsibility to provide access to care and services, and to communicate complete information on this topic to their members.

## TIMELINESS OF CARE

Eleven of the 12 regulations for Measurement and Improvement were 100% “Met.” Four of the five MC+ MCOs met all of the regulatory requirements. All five MC+ MCOs adopted, disseminated and applied practice guidelines to ensure sound and timely healthcare services for members. The MC+ MCOs used their health information systems to examine the appropriate utilization of care using national standard guidelines for utilization management. The MC+ MCOs were beginning to utilize the data and demographics in their systems to track and trend information on members to assist in determinations of risk and prevention initiatives. Several MC+ MCOs began using member and community based quality improvement groups to assist in determining barriers to services and methods to improve service delivery. The Provider Service or Relations departments of the MC+ MCOs exhibited a commitment to relationship building, as well as monitoring providers to ensure that all standards of care were met and that good service, decision-making, and sound healthcare practices occurred on behalf of MC+ Members. The MC+ MCOs all provided examples of how these relationships served to ensure that MC+ Members received timely and effective healthcare. The MC+ MCO staff would contact providers directly to make appointments whenever members expressed difficulty in obtaining timely services.

MC+ MCOs remained invested in developing programs and providing services beyond the strict obligations of the contracts. Preventive health and screening initiatives exhibited a commitment to providing the best healthcare in the least invasive manner to their MC+ Members. Partnerships with local universities and medical schools provided opportunities to obtain cutting-edge and occasionally experimental treatment options, which would not otherwise be available to MC+ Members. The MC+ MCOs observed that these efforts combined to create a system that allowed members timely access to quality healthcare.

## RECOMMENDATIONS

1. Continue to distribute the completed compliance tools to MC+ MCOs to ensure recognition of the policies and procedures that must be completed and approved to achieve compliance with federal regulations.
2. MC+ MCOs must continue to recognize the need for timely submission of all required policy and procedures. The majority of the MC+ MCOs put a tracking or monitoring system into place to ensure timely submission of documentation requiring annual approval. These systems must be maintained to ensure that this process remains a priority for all MC+ MCOs.
3. MC+ MCOs identified the need for continuing to monitor provider availability in their own networks. Although most MC+ MCOs had the number of primary care physicians (PCPs) and specialists required to operate, they admitted that many of these PCPs had closed panels and would not accept new patients. Ensuring that there is adequate access for all members, including new members, should be a priority for all MC+ MCOs.
4. MC+ MCOs identified improvement in their Quality Assessment and Improvement programs, and how this enhanced their ability to provide adequate and effective services to members. These efforts must be relentlessly continued to ensure that the organizations remain aware of areas for growth and improvement. These efforts ensure that the quality, timeliness and access to care required for member services is maintained at an exceptional MC+ MCOs continued to struggle with recruitment of certain specialty physicians.
5. Throughout discussions with MC+ MCOs the lack of orthopedic surgeons, neurosurgeons, rheumatologists, and child/adolescent psychiatrists was identified as a problem. The MC+ MCOs have made accommodations to ensure that members received the services required. Through the use of advance practice nurses, silent physician partners, cooperative agreements with medical schools, and the willingness to reimburse at commercial insurance rates, the MC+ MCOs attempt to ensure that members have access to these services. MC+ MCOs expressed continued concern for improvement in this area.

## 2.0 VALIDATION OF PERFORMANCE IMPROVEMENT PROJECTS (PIPs)



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## 2.1 Definition

A Performance Improvement Project (PIP) is defined by the Centers for Medicare and Medicaid Services (CMS) as “a project designed to assess and improve processes, and outcomes of care...that is designed, conducted and reported in a methodologically sound manner.” The Validating Performance Improvement Projects Protocol specifies that the EQRO conduct three activities in the validation of two PIPs at each MCO that have been initiated, are underway, were completed during the reporting year, or some combination of these three stages. The State Medicaid Agency (SMA: the Department of Social Services, Division of Medical Services) elected to examine projects that were underway during the preceding calendar year 2006. Criteria for identification of a PIP as outlined in the CMS protocols include the following:

- PIPs need to have a pre-test, intervention, and post-test
- PIPs need to control for extraneous factors
- PIPs need to include an entire population
- Pilot projects do not constitute a PIP
- Satisfaction studies alone do not constitute a PIP
- Focused studies are not PIPs: A focused study is designed to assess processes and outcomes on one-time basis, while the goal of a PIP is to improve processes and outcomes of care over time.

The State of Missouri contract for Medicaid Managed Care (C30611801-07) describes the following requirements for MC+ MCOs in conducting PIPs:

Performance Improvement Projects: The health plan must conduct performance improvement projects that are designed to achieve, through ongoing measurements and intervention, significant improvement, sustained over time, in clinical care and nonclinical care areas that are expected to have a favorable effect on health outcomes and member satisfaction. The health plan must report the status and results of each project to the state agency as requested. The performance improvement projects must involve the following:

- Measurement of performance using objective quality indicators.
- Implementation of system interventions to achieve improvement in quality.
- Evaluation of the effectiveness of the interventions.
- Planning and initiation of activities for increasing or sustaining improvement.
- Completion of the performance improvement project in a reasonable time period so as to generally allow information on the success of performance improvement projects in the aggregate to produce new information on quality of care every year.

- Performance measures and topics for performance improvement projects specified by CMS in consultation with the state agency and other stakeholders.

## 2.2 Purpose and Objectives

The purpose and objectives of the present review were to evaluate the soundness and results of PIPs implemented by MC+ MCOs during the calendar year 2006. The MC+ MCOs were to have two active PIPs in place, one clinical and one nonclinical. The validation process examines the stability and variability in change over multiple years.

## 2.3 Technical Methods

There are three evaluation activities specified in the protocol for Validating Performance Improvement Projects. “Activity One: Assessing the MCOs/PIHPs Methodology for Conducting the PIP” consists of ten steps:

### Activity One: Assessing the MCOs /PIHPs Methodology for Conducting the PIP

1. Step One: Review the selected study topic(s)
2. Step Two: Review the study question(s)
3. Step Three: Review selected study indicator(s)
4. Step Four: Review the identified study population
5. Step Five: Review sampling methods (if sampling was used)
6. Step Six: Review the MCOs/PIHPs data collection procedures
7. Step Seven: Assess the MCOs/PIHPs improvement strategies
8. Step Eight: Review data analysis and interpretation of study results
9. Step Nine: Assess the likelihood that reported improvement is “real” improvement
10. Step Ten: Assess whether the MCO/PIHP has sustained its documented improvement

“Activity Two: Verifying PIP Study Findings” is optional, and involves auditing PIP data. “Activity Three: Evaluate Overall Reliability and Validity of Study Findings” involves the assessing whether the

results and conclusions drawn from the PIP are valid and reliable. Activities One and Three were conducted by the EQRO.

### TIME FRAME AND SELECTION

Two projects that were underway during the preceding 12 months at each MC+ MCO were selected for validation. The projects to be validated were reviewed with SMA and EQRO staff, in December 2006. The intent was to identify projects which were mature enough for validation (i.e., planned and in the initial stages of implementation), underway or completed during calendar year 2006. The SMA made the final decision regarding the actual PIPs to be validated from the descriptions submitted by the MC+ MCOs.

### PREPARATION OF MC+ MCOs

All MC+ MCOs were contacted during November 2006 to prepare them for the 2006 External Quality Review. All MC+ MCO quality management staff or plan administrators were contacted to discuss the onset of the External Quality Review Organization (EQRO) activities and to schedule training teleconferences in November. The MCOs were explicitly requested to have all staff or subcontractors available who would be responsible for obtaining and submitting the data required to complete all validation processes. During these teleconferences, all aspects of the EQR, including the requirements of submissions for the Performance Improvement Projects, were discussed.

The training teleconference agenda, methods and objectives, and schedule were sent to all MC+ MCOs, following approval from the State Medicaid Agency (SMA), in early November 2006. SMA staff agreed to participate in these conference calls, allowing time for presentation of information, clarification, and questions. The original submission of Performance Improvement Project subjects was scheduled prior to the end of November 2006. Submission of data was scheduled for February through March 2007. This allowed for completion of all 2006 activities and compilation of initial data for projects underway in the previous year.

### REVIEWERS

Three reviewers conducted the Validating Performance Improvement Project Protocol activities, including interviews and document review. The External Quality Review Organization (EQRO) Project Director is a licensed attorney with a graduate degree in Health Care Administration, and seven years of experience in public health and managed care in two states. This was her second review. She conducted interviews and provided oversight to the PIP Protocol team. The Assistant



Project Director was conducting her third review. She has experience with the MC+ Managed Care Program implementation and operations, interviewing, program analysis, and Medicaid managed care programs in other states, and twelve years experience in program evaluation and research. The third reviewer participated in six previous MC+ Managed Care Program reviews and on-site visits. This reviewer was knowledgeable about the MC+ Managed Care Program through her experience as a former SMA employee responsible for quality assessment and improvements, as an RN, and a consultant. All reviewers were familiar with the program improvement project requirements and validation process, as well as research methods, and the requirements of the MC+ Managed Care Program.

## 2.4 Procedures for Data Collection

The evaluation involved review of all materials submitted by the MC+ MCOs including, but not limited to, the materials listed below. During the training teleconferences MC+ MCOs were encouraged to review Attachment B of the Validating Performance Improvement Projects Protocol and ensure that they include supporting documents, tools, and other information necessary to evaluate the projects submitted, based on this tool.

- Narrative descriptions
- Problem identification
- Hypotheses
- Study questions
- Description of intervention(s)
- Methods of sampling
- Planned analysis
- Sample tools, measures, survey, etc.
- Baseline data source and data
- Cover letter with clarifying information
- Overall analysis of the validity and reliability of each study
- Evaluation of the results of the PIPs

The EQRO Project Director, Assistant Project Director, and Review Consultant met with the MC+ MCO staff responsible for planning, conducting, and interpreting the findings of the PIPs during the on-site reviews occurring between July and August 2007. The review focused on the findings of projects conducted during 2006. MC+ MCOs were instructed that additional information and data not available at the time of the original submission could be provided at the time of the on-site review or shortly thereafter. The time scheduled during the on-site review was utilized to conduct follow-up questions, to review data obtained, and to provide technical assistance to MC+ MCOs regarding the planning, implementation and credibility of findings from PIPs. In addition, individual

clarifying questions were used to gather more information regarding the PIPs during the on-site interviews. The following questions were formulated and answered in the original documentation, or were posed to the MC+ MCOs during the on-site review:

- Who was the project leader?
- How was the topic identified?
- How was the study question determined?
- What were the findings?
- What were the interventions(s)?
- What was the time period of the study?
- Was the intervention effective?
- What did the MC+ MCO want to learn from the study?

All PIPs were evaluated by the Review Consultant and the Assistant Project Director. In addition, the projects were reviewed with follow-up suggestions posed by the Project Director, who approved final ratings based on all information available to the team.

## ANALYSIS

All PIPs submitted by MC+ MCOs prior to the site visits were reviewed using an expanded version of the checklist for conducting Activity One, Steps 1 through 10, and Activity Three (Judgment of the Validity and Reliability of the PIPs) of the Validating Performance Improvement Projects Protocol, Attachment B (see Appendix 2). Because certain criteria may not have been applicable for projects that were underway at the time of the review, some specific items were considered as “Not Applicable.” Criteria were rated as “Met” if the item was applicable to the PIP, if there was documentation addressing the item, and if the item could be deemed Met based on the study design. The proportion of items rated as “Met” was compared to the total number of items that were applicable for the particular PIP. Given that some PIPs were underway in the first year of implementation, it was not possible to judge or interpret: results; validity of improvement; or sustained improvements (Steps 8-10). The final evaluation of the validity and reliability of studies was based on the potential for the studies to produce credible findings. Detailed recommendations and suggestions for improvement were made for each item where appropriate, and are presented in the individual MC+ MCO summaries. Some items are rated as “Met” but continue to include suggestions and recommendations as a method of improving the information presented. The following are the general definitions of the ratings developed for evaluating the PIPs.

<b>Met:</b>	Credible, reliable, and valid methods for the item were documented.
<b>Partially Met :</b>	Credible, reliable, or valid methods were implied or able to be established for part of the item.
<b>Not Met:</b>	The study did not provide enough documentation to determine whether credible, reliable, and valid methods were employed; errors in logic were noted; or contradictory information was presented or interpreted erroneously.
<b>Not Applicable:</b>	Only to be used in Step 5, when there is clear indication that the entire population was included in the study and no sampling was conducted; or in Steps 8 through 10 when the study period was underway for the first year.

**BHC, 2005 EQR criteria**



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**Table I – Performance Improvement Project Validation Findings by MC+**

Step	Item	MC+ MCO										BA+	
		MCO P		HCUSA		MOCare		CMFHP		Ambulatory Follow-Up After Mental Health Hospitalization		Appeals Process Compliance	
		Emergency Room Utilization	Early Intervention in Prenatal Case Management	Encounter Data Acceptance	Post-Discharge Management after Inpatient Mental Health Treatment	Appropriate Use of Asthma Medications	7-Day Followup after Mental Illness Hospitalization	Well-Child Visits in First 15 Months	Improved Access to Primary Care Services				
Step 1: Selected Study Topics	1.1	2	1	1	2	2	2	2	2	2	2	2	
	1.2	2	2	1	2	2	2	2	2	2	2	2	
	1.3	2	2	2	2	2	2	2	2	2	2	2	
Step 2: Study Questions	2.1	1	2	2	2	2	2	2	2	2	2	2	
Step 3: Study Indicators	3.1	0	2	2	2	2	2	2	2	2	2	2	
	3.2	0	2	1	2	2	2	2	2	2	2	2	
Step 4: Study Populations	4.1	1	2	2	2	2	2	2	2	2	2	1	
	4.2	1	2	1	2	2	2	2	2	2	2	2	
	5.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Step 5: Sampling Methods	5.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	5.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	6.1	1	2	2	2	2	2	2	1	2	2	2	
Step 6: Data Collection Procedures	6.2	1	2	2	2	2	2	2	2	2	2	2	
	6.3	1	1	2	2	2	2	2	1	2	1	1	
	6.4	1	1	1	2	2	2	2	0	2	2	1	
	6.5	0	1	2	2	2	2	2	1	2	2	2	
	6.6	1	2	1	2	2	2	0	0	0	2	2	
Step 7: Improvement Strategies	7.1	1	2	2	2	2	2	2	2	2	2	2	
Step 8: Analysis and Interpretation of Study Results	8.1	NA	1	1	2	NA	NA	1	2	2	2	2	
	8.2	NA	2	2	2	NA	NA	1	1	2	2	2	
	8.3	NA	1	1	2	NA	NA	1	2	2	2	2	
	8.4	NA	1	2	2	NA	NA	NA	2	2	2	2	
Step 9: Validity of Improvement	9.1	NA	2	1	2	NA	NA	NA	2	NA	2	2	
	9.2	NA	1	0	2	NA	NA	NA	2	NA	NA	NA	
	9.3	NA	2	0	2	NA	NA	NA	2	NA	NA	NA	
	9.4	NA	2	0	2	NA	NA	NA	2	NA	NA	NA	
Step 10: Sustained Improvement	10	0	1	NA	1	NA	NA	NA	2	NA	NA	NA	
Number Met		6	15	11	23	15	15	14	18	19	17		
Number Partially Met		9	9	9	1	0	0	3	4	0	3		
Number Not Met		3	0	3	0	0	0	1	2	0	0		
Number Applicable		18	24	23	24	15	15	18	24	19	20		
Rate Met		33.3%	62.5%	47.8%	95.8%	100.0%	100.0%	77.8%	75.0%	100.0%	85.0%		

Note: 0 = Not Met; 1 = Partially Met; 2 = Met

## 2.5 Findings

Below are the PIPs identified for validation at each MC+ MCO:

**Mercy CarePlus** ER utilization for asthma-related diagnoses for 5-18 year olds at Cardinal Glennon Hospital

Early Intervention in Prenatal Care Management and the Relationship to the Very Low Birth Weight Babies

**HealthCare USA** Improving post-discharge management of members discharged from an inpatient service for mental illness

Increasing the overall encounter acceptance rate for encounter data sent to the State of Missouri

**Missouri Care** Increase appropriate use of medications for members with persistent asthma

Seven-day follow-up following hospitalization for Mental Illness

**Children' Mercy Family Health Partners** Improving Access to Primary Care

Well-Child visits first 15 months of life

**Blue Advantage Plus** Ambulatory follow-up program regarding mental health

Training, education and restructuring the work flow of member grievances/appeals, provider complaints, grievances/appeals to improve the response time to members and providers

**Harmony Health Plan** First year of MC+ MCO operation – PIP submission not required

### STEP 1: SELECTED STUDY TOPICS

Study topics were selected through data collection and the analysis of comprehensive aspects of member needs, care, and services; and to address a broad spectrum of key aspects of member care and services. In all cases they included all enrolled populations pertinent to the study topic without excluding certain members. Three of the 10 PIPs addressed follow-up care after discharge from hospitalization from mental illness; two addressed care for members with asthma; one addressed access to care for pregnant members with the goal of reducing low birth weight infants; one addressed access to primary care services; one addressed improving well-child visits in the first 15 months of life; one addressed improving encounter data acceptance; and one addressed improving the grievance/appeals process for members and providers.

Table I shows the ratings for each item and PIP by MC+ MCO. All 10 PIPs provided some rationale demonstrating the extent of the need for the PIP and provided adequate information to support

selection of the study topic. Most discussed literature supporting the activities to be undertaken, and provided some benchmark comparison data. While this entire section was not perfect the MC+ MCOs met all the criteria required 80% of the time. MC+ MCOs addressed a broad spectrum of key aspects of member care and services (9 of the 10 PIPs, 90%, Met this criteria and one Partially Met this criteria; Step 1.2). Each MC+MCO submitted one clinical and one non-clinical intervention for review. An array of aspects of enrollee care and services that were related to the identified problem was described. Utilization or cost issues may be examined through a PIP, but were not to be the sole focus of any study. There were some descriptions of the member populations targeted for intervention in the PIPs. Because the MC+ MCOs vary widely in the member populations they serve (e.g., other state Medicaid managed care members, commercial members, or Medicare members), it was not entirely possible to determine the extent to which the PIP identified, addressed, and measured the needs of the MC+ Managed Care Program population in all cases. In addition, PIPs should specifically indicate whether all enrolled populations within the MC+ Managed Care Program were included in the interventions. Finally, age and demographic characteristics should be described. All ten of the PIPs (100%) Met these criteria (Step 1.3).

## STEP 2: STUDY QUESTIONS

Study questions are statements in the form of a question that describe the potential relationship between the intervention, the intended outcome, and the data to be obtained and analyzed. They should be specific enough to suggest the study methods and the outcome measures. The MC+ MCOs made a concerted effort to ensure that statements were provided in the form of a question, and in most cases the questions were directly related to the hypotheses and topic selected. Nine (90%) of the PIPs included clearly stated study questions (Step 2.1). The study purposes identified were consistent with the remainder of the PIP (the target population, interventions, measures, or methods) in most instances.

**Table 2 - Summary of Performance Improvement Project Validation Ratings by Item, All MC+ MCOs**

Step	Item	All MC+ MCOs				
		Number Met	Number Partially Met	Number Not Met	Total Number Applicable	Rate Met
Step 1: Selected Study Topics	1.1	8	2	0	10	80.00%
	1.2	9	1	0	10	90.00%
	1.3	10	0	0	10	100.00%
Step 2: Study Questions	2.1	9	1	0	10	90.00%
Step 3: Study Indicators	3.1	9	0	1	10	90.00%
	3.2	8	1	1	10	80.00%
Step 4: Study Populations	4.1	8	2	0	10	80.00%
	4.2	8	2	0	10	80.00%
	5.1	0	0	0	0	n/a
Step 5: Sampling Methods	5.2	0	0	0	0	n/a
	5.3	0	0	0	0	n/a
	6.1	8	2	0	10	80.00%
Step 6: Data Collection Procedures	6.2	9	1	0	10	90.00%
	6.3	6	4	0	10	60.00%
	6.4	5	4	1	10	50.00%
	6.5	7	2	1	10	70.00%
	6.6	6	2	2	10	60.00%
Step 7: Improvement Strategies	7.1	9	1	0	10	90.00%
Step 8: Analysis and Interpretation of Study Results	8.1	4	3	0	7	57.14%
	8.2	5	2	0	7	71.43%
	8.3	4	3	0	7	57.14%
	8.4	5	1	0	6	83.33%
	9.1	4	1	0	5	80.00%
Step 9: Validity of Improvement	9.2	2	1	1	4	50.00%
	9.3	3	0	1	4	75.00%
	9.4	3	0	1	4	75.00%
Step 10: Sustained Improvement	10.1	1	2	1	4	25.00%
<b>Number Met</b>		<b>150</b>	<b>39</b>	<b>10</b>	<b>198</b>	<b>75.76%</b>

Note: Percent Met = Number Met/Number Applicable; Item refers to the Protocol specifications.

Source: BHC, Inc., 2006 External Quality Review Performance Improvement Project Validation

### STEP 3: STUDY INDICATORS

Most of the PIPs “Met” the criteria for defining and describing the calculation of study indicators. Nine (90%) of the PIPs Met the criteria for using objective, clearly defined, measurable indicators while one was rated as Not Met (Step 3.1). The calculation of measures was described and explained. Even when well-known measures were used (e.g., Health Employer Data Information Set; HEDIS; Consumer Assessment of Health Plans Survey; CAHPS), there was a detailed description of the methods (e.g., Administrative or Hybrid Method) and formulas for calculating the measures. Again, because MC+ MCOs vary in their method of calculation, details regarding the measures and



methods of calculating those measures should be included in PIPs. All but two of the 10 PIPs identified and detailed at least one study indicator that was related to health or functional status; or to processes of care strongly associated with outcomes. Eight of the 10 (80%) were rated as “Met” (Step 3.2); one was Partially Met and one was Not Met. The link between the intervention and the outcomes measured by the PIP should be explicit in the narrative.

#### STEP 4: STUDY POPULATIONS

The MC+ MCOs all made an attempt to meet the criteria for adequately defining the study population. The evaluation examines if all the MC+ Managed Care Program Members to whom the study question(s) and indicator(s) were relevant are included. Eight of the 10 (80%) did include adequate information to make this determination (Step 4.1). All PIPs, including those considered non-clinical, made an attempt to define the applicable study population considered. The selection criteria should clearly describe the MC+ Managed Care Member populations included in the PIP and their demographic characteristics. Eight of the 10 PIPs (80.0%) described data collection approaches indicating that data for all members to whom the study question applied were collected (Step 4.2). In most cases there was a description that at least allowed inference of how data were collected and how participants were identified.

#### STEP 5: SAMPLING METHODS

None of these PIPs employed true sampling techniques. The type of sample (e.g., convenience, random) or sampling methods (e.g., simple, cluster, stratified) should be described if utilized.

#### STEP 6: DATA COLLECTION PROCEDURES

Eight of the 10 PIPs (80%) described the data to be collected with adequate detail and description of the units of measurement used (Step 6.1). Nine of the 10 (90%) PIPs clearly specified the sources of data (e.g., claims, members, providers, medical records) for each measure (Step 6.2). Some MC+ MCOs used the National Committee for Quality Assurance (NCQA) Quality Improvement Activity (QIA) Form to write up their PIP narrative. This form provides a structure for reporting measures and data sources. However, when there is more than one source of data, it is important that the MC+ MCO specifically states the sources of data for each measure. The MC+ MCOs were reminded that the strict use of this format limits the narrative and explanation that must accompany the PIP in order for the EQRO to validate each element. Six of the 10 PIPs (60%) clearly described systematic and reliable methods of data collection (Step 6.3). There was some description of the

data collection procedures in all cases. It is not possible to judge the reliability or credibility of any PIP without sufficient detail regarding data collection processes, procedures, or frequency. Five of the PIPs used a data collection instrument that was described in detail. Five provided information on the methods or instruments to be used to collect data, but the information was not presented in a method which allowed that consistent and accurate data would be collected over time (Step 6.4). In one case the MC+MCO did not provide adequate information to determine if accurate data would be collected over time. However, five (50%) Met this element, and four Partially Met this element.

When using surveys, medical records, or telephone protocols for data collection, it is important to provide the tool for review, discuss the piloting of the tool, and discuss training and interrater reliability for the recording of information on the tool. Standard provider and consumer surveys provide manuals describing the characteristics of instruments that should be incorporated into the narrative of the PIP. This level of detail was not provided in the narrative for all PIPs, but in most cases the calculation of the measure did include sufficient information to make a judgment for this validation element.

Seven of the PIPs (70%) included a complete data analysis plan, while two additional PIPs were rated Partially Met for specifying a plan (Step 6.5). Only one PIP submitted did not include any information that prospectively specified a data analysis plan. This plan should be developed prior to the implementation of the PIP, be based on the study questions, explain the expected relation between the intervention(s) and outcome(s) being measured (i.e. independent and dependent variables), and include the method(s) of data collection, and the nature of the data (e.g., nominal, ordinal, scale).

Six of the 10 (60%) PIPs identified the project leader and qualifications of that individual in the narrative submitted. They also identified who was involved in or provided oversight for the design, implementation, data analysis, and interpretation of the PIP (Step 6.6). MC+ MCO staff interviewed on-site also included team members who were involved and knowledgeable about the PIPs and methods. Additional information about all the PIP team members and their qualifications and roles were rarely described in detail. This information would have provided additional clarification and validity to the process and the measures. When submitting subsequent information after the on-site review, most MC+ MCOs did provide additional information about PIP team members. Two MC+ MCOs did not provide adequate information to provide confidence that the staff involved in implementing and managing the PIP were qualified.

## STEP 7: IMPROVEMENT STRATEGIES

Nine of the 10 (90%) PIPs identified reasonable interventions to address the barriers identified through data analysis and quality improvement processes undertaken. One of the PIPs was Partially Met in this requirement. The nature of identification of the barriers, a description of barriers, and a plan for addressing barriers should be described.

## STEP 8: DATA ANALYSIS AND INTERPRETATION OF STUDY RESULTS

Seven of the 10 (70.0%) PIPs were mature enough to have data to analyze. These MC+ MCOs conducted the analyses according to the data analysis plan (Step 8.1). Of the 7 PIPs that presented baseline or re-measurement data, five (71.437%) presented numerical findings accurately and clearly (Step 8.2). In some instances, data were presented in formats different from those described in the calculation of measures (e.g., presenting percentages in graphic format while the description of the calculation of measures indicated rates per 1,000). Two PIPs Partially Met this criteria. Axis labels and units of measurement should be reported in Tables and in Figure legends and this information should be made clearly identifiable to the reader. In one case the baseline data was in table form and the re-measurement was in a graphic form. This creates difficulty in evaluation of the data presented.

Of the seven PIPs that presented at least one re-measurement period, four (57.14%) indicated the re-measurement period for all of the measures identified in the study (Step 8.3). Of the six PIPs describing the findings, five (83.33%) described the extent to which the intervention was effective (Step 8.4).

## STEP 9: VALIDITY OF IMPROVEMENT

Four of the five PIPs (80%) with re-measurement points used the same method at re-measurement as the baseline measurement (Step 9.1). Whenever possible the baseline measure should be recalculated consistent with the re-measurement method to ensure validity of reported improvement and comparability of measurement over time. One PIP did explain that the MC+ Medicaid eligibility criteria changed during the measurement year. How this change was incorporated into the baseline information was clearly explained and documented. The same source of measures should also be used at re-measurement points. Two of the four PIPs (50%) that were mature enough to include data analysis employed statistical significance testing to document

quantitative improvements in care (Step 9.2). They were able to show significant improvement over multiple re-measurement points, however, this improvement was not always statistically significant. Three of four (75%) PIPs reporting improvements had face validity, meaning that the reported improvement was judged to have been related to the intervention applied (Step 9.3). These PIPs provided some discussion or interpretation of findings by MC+ MCOs. Additional narrative in this area would ensure proper evaluation of all data and information provided. After reporting findings, there should be some interpretation as to whether the intervention or other factors may have accounted for improvement, decline, or lack of change. Three of the four PIPs (75%) that had reached a level of maturity to include this data did provide statistical evidence that the observed improvement was true improvement (Step 9.4). Then, barriers should be identified and addressed for the next cycle of the PIP, or reasons for discontinuing the PIP should be described.

#### **STEP 10: SUSTAINED IMPROVEMENT**

Of the four PIPs examining multiple measurement points over time, three (75%) PIPs used statistical significance testing to demonstrate improvement. One PIP (25%) showed statistically significant improvement over several measurement points. The low numbers in this area are a function of the lack of maturity that many of the PIPs exhibited.

## **2.6 Conclusions**

Across all MC+ MCOs, the range in proportion of criteria that were Met for each PIP validated was 25.0% through 100%. Across all PIPs validated statewide, 75.0% of criteria were met. All sources of available data were used to develop the ratings for the PIP items. The EQRO comments were developed based on the written documentation and presentation of findings. In all cases, there was enough information provided to validate the PIPs. On-site interviews and subsequent information provided revealed in-depth knowledge of the PIPs and detailed outcomes.

All of the PIPs presented included thoughtful and complex information. In some of the PIPs, enhanced information obtained at the on-site review, made it clear that the MC+ MCOs intended to use this process to improve organizational functions and the quality of services available or delivered to members. In several cases the performance improvement project had already been incorporated into MC+ MCO daily operations. PIPs are to be ongoing, with periodic re-measurement points. At least quarterly re-measurement is recommended to provide timely feedback to the MC+ MCO regarding the need to address barriers to implementation. MC+ MCO personnel involved in PIPs

had extensive experience in clinical service delivery, quality improvement, and monitoring activities. It was clear that they had made a significant improvement and investment in designing valid evaluation studies using sound data collection and analysis methods. This requires technical expertise in health services research and/or program evaluation design.

Based on the PIP validation process, at least four MC+ MCOs (Children's Mercy Family Health Partners, Blue-Advantage Plus of Kansas City, HealthCare USA, and Missouri Care) had active and ongoing PIPs as part of their quality improvement programs. One MC+ MCO (Mercy CarePlus) significantly improved their utilization of the PIP process as a tool to develop their performance and improve services to members. An improved commitment to the quality improvement process was observed during the on-site review at this MC+ MCO. This MC+ MCOs' PIPs were the least mature, but were vastly improved from prior submissions.

**Table 3 - Validity and Reliability of Performance Improvement Project Results**

PIP Name	Rating
Emergency Room Utilization	Low Confidence
Early Intervention in Prenatal Care Management	Moderate Confidence
Encounter Data Acceptance	Moderate Confidence
Post-Discharge Management after Inpatient Mental Health Treatment	High Confidence
Appropriate Use of Asthma Medications	Moderate Confidence
7-Day Follow-Up After Hospitalization for Mental Illness	Moderate Confidence
Well-Child Visits in the First 15 Months of Life	Low Confidence
Improved Access to Primary Care Services	Moderate Confidence
Ambulatory Follow-Up After Mental Health Hospitalization	Moderate Confidence
Appeals Process Compliance	Moderate Confidence

**Note:** Not Credible = There is little evidence that the study will or did produce results that could be attributed to the intervention(s); Low Confidence = Few aspects of the PIP were described or performed in a manner that would produce some confidence that findings could be attributed to the intervention(s); Moderate Confidence = Many aspects of the PIP were described or performed in a manner that would produce some confidence that findings could be attributed to the intervention(s); High Confidence = The PIP study was conducted or planned in a methodologically sound manner, with internal and external validity, standard measurement, and data collection practices, and appropriate analyses to calculate that there is a high level of confidence that improvements were a result of the intervention. A 95% to 99% level of confidence in the findings was or may be able to be demonstrated.

Source: BHC, Inc., 2006 *External Quality Review Performance Improvement Project Validation*.

The following summarizes the quality, access, and timeliness of care assessed during this review, and recommendations based on the findings of the Validation of Performance Improvement Projects activity.

## ACCESS TO CARE

Access to care was an important theme addressed throughout all the PIP submissions reviewed. Specific PIPs attempted to impact the access to primary care physicians for members who used the emergency room as the means of obtaining medical services (Children's Mercy Family Health Partners). Two MC+MCOs focused on education and support to obtain appropriate medications for the treatment of asthma (Mercy CarePlus and Missouri Care). All the projects reviewed used the format of the PIP to improve access to care for members. Three of the projects clearly focused on ensuring the members had adequate and timely access to services after being hospitalized for mental health related issues (HealthCare USA, Missouri Care, BA+). The on-site discussions with MC+ MCO staff indicate that they realize that improving access to care is an ongoing aspect of all projects that are developed.

## QUALITY OF CARE

Topic identification was an area that provided evidence of the attention to providing quality services to members. Intervention development for PIPs also focused on the issue of quality services. All PIPs reviewed focused on topics that needed improvement, either in the internal processes used to operate the MC+ MCO, or in the direct provision of services delivered. The corresponding interventions that address barriers to quality care and health outcomes were clearly evident in the narratives submitted, as well as in the discussions with MC+ MCOs during the on-site review. These interventions addressed key aspects of enrollee care and services, such as medication and treatment management; risk identification and stratification for various levels of care; monitoring provider access and quality services; and preventive care. These efforts exemplified an attention to quality healthcare services.

## TIMELINESS OF CARE

Timeliness of care was the major focus of a number of the PIPs reviewed. Three projects identified the need for timely aftercare for members who required inpatient hospitalization for mental illness (HealthCare USA, Missouri Care, and BA+). The remaining projects focused on subjects such as timely encounter data acceptance (HealthCare USA), appropriate medications and treatment for asthma (Mercy CarePlus, Missouri Care), improved access to primary care (Children's Mercy Family

Health Partners), improved access to well-child visits in the first 15 months of life. All addressed the need for timely access to preventive and primary health care services. The MC+ MCOs all related their awareness of the need to provide not only quality, but timely services to members. Projects reflected this awareness in that they addressed internal processes and direct service improvement.

## RECOMMENDATIONS

1. It is recommended that MC+ MCOs continue to refine their skills in the development and implementation of the Performance Improvement Projects. Improved training, assistance and expertise for the design, statistical analysis, and interpretation of PIP findings are available. One MC+ MCO (Children's Mercy Family Health Partners) utilized the services of a statistician from a local university to ensure valid and reliable findings.
2. In the design of PIPs, MC+ MCOs need to use generally accepted practices for program evaluation to conduct PIPs. In addition to training on the development of PIPs and on-site technical assistance, references to the CMS protocol, "Conducting Performance Improvement Projects" were recommended by the EQRO at each MC+ MCO as a guideline to frame the development, reporting and analysis of the PIP.
3. PIPs should be conducted on an ongoing basis, with at least quarterly measurement of some indices to provide data about the need for changes in implementation, data collection, or interventions.
4. PIPs that are not yet complete should include narrative reflecting next steps and the plan for how the PIP will be maintained and enhanced for future years.
5. It continues to be recommended that a statewide PIP be initiated by the SMA and the MC+ QA & I Group for planning and implementation one year prior to the planned implementation.
6. It appears that many MC+ MCOs conduct PIPs on an ongoing basis as part of their quality improvement program. Continuing to utilize these PIPs as tools to improve the organizations ability to serve members will be beneficial.

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## 3.0 VALIDATION OF PERFORMANCE MEASURES



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**Performance Management Solutions Group**

A division of Behavioral Health Concepts, Inc.

## 3.1 Definition

The Validating Performance Measures Protocol requires the EQRO to validate three performance measures at each MC+ MCO, as selected by the State Medicaid Agency (SMA; the Missouri Department of Social Services, Division of Medical Services). The three performance measures validated by the EQRO were the HEDIS 2006 measures of Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life, Prenatal and Postpartum Care, and Follow-Up After Hospitalization for Mental Illness. Protocol activities involved the review of the data management processes of the MC+ MCO, evaluation of algorithmic compliance with performance measure specifications, and verification of either the entire set or a sample of the performance measures to confirm that the reported results are based on accurate service information.

## 3.2 Purpose and Objectives

The objectives for validating performance measures were to: 1) evaluate the accuracy of Medicaid performance measures reported by, or on behalf of, MC+ MCOs; and 2) determine the extent to which MC+ MCO-specific performance measures calculated by MC+ MCOs (or by entities acting on behalf of MC+ MCOs) followed specifications established by the SMA and the State Public Health Agency (SPHA; Missouri Department of Health and Senior Services; DHSS) for the calculation of the performance measure(s).

### REVIEWERS

Two reviewers conducted the Validating Performance Measure Protocol activities, including interviews and document review. The External Quality Review Organization (EQRO) Project Director is a licensed attorney with a graduate degree in Health Care Administration, and seven years of experience in public health and managed care in two states. She conducted interviews and document review. The EQRO Research Analyst is an Information Technology specialist with a Bachelors Degree in Computer Science and a Masters Degree in Business Administration. She has worked for over three years managing data in large and small databases. She conducted interviews and performed data analysis.



### 3.3 Technical Methods

The reliable and valid calculation of performance measures is necessary for calculating statewide rates; comparing MC+ MCO performance with other MC+ MCOs; and for comparing State and MC+ MCO performance with national benchmark data for Medicaid managed care and/or Commercial Managed Care Organization (MCO) members. These calculations allow MCO members to evaluate program effectiveness and access to care. State of Missouri requirements for MC+ MCO performance measurement and reporting were reviewed. The Missouri Code of State Regulations (19 CSR §10-5.010 Monitoring Health Maintenance Organizations) contains provisions requiring all Health Maintenance Organizations (HMOs) operating in the State of Missouri to submit to the State SPHA member satisfaction survey findings and quality indicator data in formats conforming to the National Committee for Quality Assurance (NCQA) Health Employer Data Information Set (HEDIS) Data Submission Tool (DST) and all other HEDIS Technical Specifications<sup>9</sup> for performance measure descriptions and calculations. Additionally, the State of Missouri contract for Medicaid Managed Care (C30611801-07, Revised Attachment 6, Quality Improvement Strategy) stipulates that MC+ MCOs will follow the instructions of the SPHA for submission of HEDIS measures. The three measures selected by the SMA for validation were required to be calculated and reported by MC+ MCOs to both the SMA and the SPHA for MC+ Managed Care Members. The HEDIS 2006 Technical Specifications were reviewed for each of the three measures and are summarized below (see Tables 4, 5, and 6).

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<sup>9</sup> National Committee for Quality Assurance (2005). HEDIS 2006, Volume 2: Technical Specifications. Washington, D.C.: NCQA.

## HEDIS 2006 PRENATAL AND POSTPARTUM CARE (PPC)

The following is the definition of the Prenatal and Postpartum Care measure, an Access/Availability of Care measure, as defined by the NCQA.

*The percentage of deliveries of live births between November 6 of the year prior to the measurement year and November 5 of the measurement year. For these women, the measure assesses the following facets of prenatal and postpartum care:*

- *Timeliness of Prenatal Care. The percentage of deliveries that received a prenatal care visit as a member of the MCO in the first trimester or within 42 days of enrollment in the MCO.*
- *Postpartum Care. The percentage of deliveries that had a postpartum visit on or between 21 and 56 days after delivery*

**Table 4 - HEDIS 2006 Technical Specifications for Prenatal and Postpartum Care (PPC)**

I. Eligible Population	
<b>Product lines</b>	Commercial, Medicaid (report each product line separately).
<b>Age</b>	None specified.
<b>Continuous enrollment</b>	43 days prior to delivery through 56 days after delivery.
<b>Allowable gap</b>	No allowable gap during the continuous enrollment period.
<b>Anchor date</b>	Date of delivery.
<b>Benefit</b>	Medical.
<b>Event/diagnosis</b>	<i>Delivered a live birth on or between November 6 of the year prior to the measurement year and November 5 of the measurement year. Women who delivered in a birthing center should be included in this measure. Refer to Tables PPC-A and PPC-B to identify live births.</i>  <i>Multiple births. Women who had two separate deliveries (different dates of service) between November 6 of the year prior to the measurement year and November 5 of the measurement year should be counted twice. Women who had multiple live births during one pregnancy should be counted once in the measure.</i>

## II. Administrative Specification

### **Denominator**

The MCO should follow the first two steps below to identify the eligible population. This population is the denominator for both rates.

**Step 1 Identify live births.** Identify all women with a live birth between November 6, 2004, and November 5, 2005, using Method 1 and Method 2 below.

**Method 1** The codes listed below both identify a delivery and indicate that the outcome of the delivery was a live birth; Women who are identified through the codes listed in Method 1 are automatically included in the eligible population and require no further verification of the outcome.

650, V27.0, V27.2, V27.3, V27.5, V27.6, V30-V37\*, V39\*

\*These codes are from the infant's records and are optional if the MCO is unable to link infant and mother records

**Method 2** Identifying deliveries and verifying live births.

The codes in Step A below identify deliveries but do not indicate the outcome. The MCO must use Step B to eliminate deliveries that did not result in a live birth.

**Step A:** 59400, 59409, 59410, 59510, 59514, 59515, 59610, 59612, 59614, 59618, 59620, 59622, 72.0-73.99\*, 74.0-74.2\*, 74.4\*, 74.99\*, 640.x1, 641.x1, 642.x1, 642.x2, 643.x1, 644.21, 645.11, 645.21, 646.x1, 646.12, 646.22, 646.42, 646.52, 646.62, 646.82, 647.x1, 647.x2, 648.x1, 648.x2, 651.x1, 652.x1, 653.x1, 654.x1, 654.02, 654.12, 654.32, 654.42, 654.52, 654.62, 654.72, 654.82, 654.92, 655.x1, 656.01, 656.11, 656.21, 656.31, 656.51, 656.61, 656.71, 656.81, 656.91, 657.01, 658.x1, 659.x1, 660.x1, 661.x1, 662.x1, 663.x1, 664.x1, 665.01, 665.11, 665.22, 665.31, 665.41, 665.51, 665.61, 665.71, 665.72, 665.81, 665.82, 665.91, 665.92, 666.x2, 667.x2, 668.x1, 668.x2, 669.01, 669.02, 669.11, 669.12, 669.21, 669.22, 669.32, 669.41, 669.42, 669.51, 669.61, 669.71, 669.81, 669.82, 669.91, 669.92, 670.02, 671.01, 671.02, 671.11, 671.12, 671.21, 671.22, 671.31, 671.42, 671.51, 671.52, 671.81, 671.82, 671.91, 671.92, 672.02, 673.x1, 673.x2, 674.01, 674.x2, 675.x1, 675.x2, 676.x1, 676.x2, 370-375

**Step B:** 630-637, 639, 656.4\*, 768.0, 768.1, V27.1\*, V27.4\*, V27.7\*

\*These codes are OB procedure ICD-9-CM codes and are found in the mother's record

**Step 2 Identify continuous enrollment.** For women identified in step 1, determine if enrollment was continuous between 43 days prior to delivery and 56 days after delivery, with no gaps.

### **Numerator**

**Timeliness of prenatal care** A prenatal visit in the first trimester or within 42 days of enrollment, depending on the date of enrollment in the MCO and any gaps in enrollment during the pregnancy. Includes only visits that occur while the member was enrolled.



**Step 3 Determine enrollment status during the first trimester.** Determine if women identified in step 2 were enrolled on or before 280 days prior to delivery (or estimated date of delivery [EDD]). For these women, go to step 4. For women not enrolled on or before 280 days prior to delivery (or EDD), who were therefore pregnant at the time of enrollment, proceed to step 6.

**Step 4 Determine continuous enrollment for the first trimester.** Determine if women identified in step 3 were continuously enrolled during the first trimester (176–280 days prior to delivery [or EDD]) with no gaps in enrollment. For these women, use one of the four decision rules in the Table PPC-C to determine if there was a prenatal visit during the first trimester.<sup>10</sup> For women who were not continuously enrolled during the first trimester, proceed to the next step.

**Step 5 For women who had a gap between 176 and 280 days prior to delivery, proceed to step 6.**

**Step 6 For women identified in step 3 and step 5, determine the start date of the last enrollment segment.<sup>2</sup>** For women not enrolled in the MCO on or before 280 days prior to delivery (or EDD) and for women who had a gap between 176 and 280 days prior to delivery (step 5), determine the start date of the last enrollment segment.

For women whose last enrollment started on or between 219 and 279 days prior to delivery, proceed to step 7. For women whose last enrollment started less than 219 days prior to delivery proceed to step 8.

**Step 7 Determine if enrollment started on or between 219 and 279 days prior to delivery.** If the last enrollment segment started on or between 219 and 279 days prior to delivery, determine numerator compliance using the numerator criteria in Table PPC-D and find a visit between the last enrollment start-date and 176 days prior to delivery.<sup>3</sup>

**Step 8 Determine if enrollment started less than 219 days prior to delivery** (i.e., between 219 days prior to delivery and the day of delivery). If the last enrollment segment started less than 219 days prior to delivery, determine numerator compliance using Table PPC-D numerator criteria for a visit within 42 days after enrollment.

<sup>10</sup>If the member identified in step 3 was continuously enrolled for the first trimester (176–280 days prior to delivery with no gaps during this period), the MCO has sufficient opportunity to provide prenatal care in the first trimester. Thus, the MCO must use the Table PPC-C numerator criteria. Any enrollment gaps in the second and third trimesters are incidental.

**Table PPC-C**

Decision Rule 1
Marker Event
Any prenatal care visit to an OB practitioner, a midwife or family practitioner or other primary care practitioner with documentation of when prenatal care was initiated.
Administrative
<i>Any one code:</i> <ul style="list-style-type: none"> <li>• <b>CPT code:</b> 59400*, 59510*, 59610*, 59618*, 59425**, 59426**</li> <li>• <b>CPT Category II code:</b> 0500F, 0501F, 0502F</li> </ul>

Decision Rule 2									
Marker Event									
Any visit to an OB practitioner or midwife with one of the following:									
<ul style="list-style-type: none"> <li>• Obstetric panel</li> <li>• TORCH antibody panel</li> <li>• Rubella antibody/titer with Rh incompatibility (ABO/Rh blood typing)</li> <li>• Ultrasound (echocardiography) of pregnant uterus</li> <li>• Pregnancy-related diagnosis code</li> <li>• ICD-9-CM V code for prenatal care</li> </ul>									
The member must meet criteria in Part A <b>and</b> (Part B <b>or</b> Part C).									
<b>Part A:</b> Any one code.									
<ul style="list-style-type: none"> <li>• <b>CPT Code:</b> 99201-99205, 99211-99215</li> <li>• <b>UB-92 Revenue code:</b> 514</li> </ul>									
<b>Part B:</b> Any one code.									
<ul style="list-style-type: none"> <li>• <b>CPT:</b> 76801, 76802, 76805, 76810, 76811, 76812, 76815, 76816, 76817, 76818, 80055</li> <li>• <b>ICD-9-CM code:</b> 640.x3, 641.x3, 642.x3, 643.x3, 644.x3, 645.x3, 646.x3, 647.x3, 648.x3, 651.x3, 652.x3, 653.x3, 654.x3, 655.x3, 656.x3, 657.x3, 658.x3, 659.x3</li> <li>• <b>ICD-9-CM V code:</b> V22-V23, V28</li> <li>• <b>UB-92 Occurrence code:</b> 10</li> <li>• <b>LOINC:</b> 24314-7, 24364-2</li> </ul>									
<b>Part C:</b> One of the following.									
<b>TORCH:</b> A code for each of the four infections must be present for this component	<table border="1" style="width: 100%;"> <tr> <td style="width: 50%;">Cytomegalovirus</td><td> <ul style="list-style-type: none"> <li>• <b>CPT Code:</b> 86644</li> </ul> </td></tr> <tr> <td>Herpes simplex</td><td> <ul style="list-style-type: none"> <li>• <b>CPT Code:</b> 86694</li> </ul> </td></tr> <tr> <td>Rubella</td><td> <ul style="list-style-type: none"> <li>• <b>CPT Code:</b> 86762</li> <li>• <b>LOINC:</b> 5330-6, 5331-4, 5332-2, 5333-0, 5334-8, 5335-5, 8013-5, 8014-3, 8015-0, 13279-5, 13280-3, 17550-5, 22496-4, 22497-2, 24116-6, 25298-1, 25420-1, 25514-1, 31616-6, 34421-8, 34952-2</li> </ul> </td></tr> <tr> <td>Toxoplasma</td><td> <ul style="list-style-type: none"> <li>• <b>CPT Code:</b> 86777</li> </ul> </td></tr> </table>	Cytomegalovirus	<ul style="list-style-type: none"> <li>• <b>CPT Code:</b> 86644</li> </ul>	Herpes simplex	<ul style="list-style-type: none"> <li>• <b>CPT Code:</b> 86694</li> </ul>	Rubella	<ul style="list-style-type: none"> <li>• <b>CPT Code:</b> 86762</li> <li>• <b>LOINC:</b> 5330-6, 5331-4, 5332-2, 5333-0, 5334-8, 5335-5, 8013-5, 8014-3, 8015-0, 13279-5, 13280-3, 17550-5, 22496-4, 22497-2, 24116-6, 25298-1, 25420-1, 25514-1, 31616-6, 34421-8, 34952-2</li> </ul>	Toxoplasma	<ul style="list-style-type: none"> <li>• <b>CPT Code:</b> 86777</li> </ul>
Cytomegalovirus	<ul style="list-style-type: none"> <li>• <b>CPT Code:</b> 86644</li> </ul>								
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Toxoplasma	<ul style="list-style-type: none"> <li>• <b>CPT Code:</b> 86777</li> </ul>								

<b>Rubella/ABH/Rh:</b> A code for Rubella <b>and</b> (ABO <b>or</b> Rh) must be present for this component	Rubella	<ul style="list-style-type: none"> <li>• <b>CPT Code:</b> 86762</li> <li>• <b>LOINC:</b> 5330-6, 5331-4, 5332-2, 5333-0, 5334-8, 5335-5, 8013-5, 8014-3, 8015-0, 13279-5, 13280-3, 17550-5, 22496-4, 22497-2, 24116-6, 25298-1, 25420-1, 25514-1, 31616-6, 34421-8, 34952-2</li> </ul>
	ABO	<ul style="list-style-type: none"> <li>• <b>CPT Code:</b> 86900</li> <li>• <b>LOINC:</b> 883-9</li> </ul>
	Rh	<ul style="list-style-type: none"> <li>• <b>CPT Code:</b> 86901</li> <li>• <b>LOINC:</b> 10331-7, 34961-3</li> </ul>
	ABO and Rh	<ul style="list-style-type: none"> <li>• <b>LOINC:</b> 34530-6, 882-1, 884-7</li> </ul>

Decision Rule 3		
Marker Event		
<i>Any visit to a family practitioner or other primary care practitioner** with one of the following:</i>		
<ul style="list-style-type: none"> <li>• Obstetric panel</li> <li>• TORCH antibody panel</li> <li>• Rubella antibody/titer with Rh incompatibility (ABO/Rh blood typing)</li> <li>• Ultrasound of the pregnant uterus</li> </ul>		
<b>AND</b> one of the following:		
<ul style="list-style-type: none"> <li>• Pregnancy-related diagnosis code</li> <li>• ICD-9-CM V code for prenatal care</li> </ul>		
Decision Rule 3		
Administrative		
The member must meet criteria in Part A <b>and</b> (Part B <b>or</b> Part C) <b>and</b> Part D.		
<b>Part A:</b> Any one code.		
<ul style="list-style-type: none"> <li>• <b>CPT code:</b> 99201-99205, 99211-99215</li> <li>• <b>UB-92 Revenue code:</b> 514</li> </ul>		
<b>Part B:</b> Any one code.		
<ul style="list-style-type: none"> <li>• <b>CPT:</b> 76801, 76802, 76805, 76810, 76811, 76812, 76815, 76816, 76817, 76818, 80055</li> <li>• <b>LOINC:</b> 24314-7, 24364-2</li> </ul>		
<b>Part C:</b> One of the following.		
<b>TORCH:</b> A code for each of the four infections must be present for this component	Cytomegalovirus	<ul style="list-style-type: none"> <li>• <b>CPT Code:</b> 86644</li> </ul>
	Herpes simplex	<ul style="list-style-type: none"> <li>• <b>CPT Code:</b> 86694</li> </ul>
	Rubella	<ul style="list-style-type: none"> <li>• <b>CPT Code:</b> 86762</li> <li>• <b>LOINC:</b> 5330-6, 5331-4, 5332-2, 5333-0, 5334-8, 5335-5, 8013-5, 8014-3, 8015-0, 13279-5, 13280-3, 17550-5, 22496-4, 22497-2, 24116-6, 25298-1, 25420-1, 25514-1, 31616-6, 34421-8, 34952-2</li> </ul>
	Toxoplasma	<ul style="list-style-type: none"> <li>• <b>CPT Code:</b> 86777</li> </ul>
	Rubella	<ul style="list-style-type: none"> <li>• <b>CPT Code:</b> 86762</li> <li>• <b>LOINC:</b> 5330-6, 5331-4, 5332-2, 5333-0, 5334-8, 5335-5, 8013-5, 8014-3, 8015-0, 13279-5, 13280-3, 17550-5, 22496-4, 22497-2, 24116-6, 25298-1, 25420-1, 25514-1, 31616-6, 34421-8, 34952-2</li> </ul>
<b>Rubella/ABH/Rh:</b> A code for Rubella <b>and</b> (ABO <b>or</b> Rh) must be present for this component		

	ABO	<ul style="list-style-type: none"> <li><b>CPT Code:</b> 86900</li> <li><b>LOINC:</b> 883-9</li> </ul>
	Rh	<ul style="list-style-type: none"> <li><b>CPT Code:</b> 86901</li> <li><b>LOINC:</b> 10331-7, 34961-3</li> </ul>
	ABO and Rh	<ul style="list-style-type: none"> <li><b>LOINC:</b> 34530-6, 882-1, 884-7</li> </ul>

**Part D:** Any one code.

- ICD-9-CM code:** 640.x3, 641.x3, 642.x3, 643.x3, 644.x3, 645.x3, 646.x3, 647.x3, 648.x3, 651.x3, 652.x3, 653.x3, 654.x3, 655.x3, 656.x3, 657.x3, 658.x3, 659.x3
- ICD-9-CM V code:** V22-V23, V28
- UB-92 Occurrence code:** 10

Decision Rule 4
<b>Marker Event</b>
Any visit to a family practitioner or other primary care practitioner with diagnosis-based evidence of prenatal care in the form of a documented LMP or EDD with either a completed obstetric history or risk assessment and counseling/education.
<b>Administrative</b>
The member must meet criteria in Part A <b>and</b> Part B.
<b>Part A:</b> Any code.
<ul style="list-style-type: none"> <li><b>CPT code:</b> 99201-99205, 99211-99215</li> <li><b>UB-92 Revenue code:</b> 514</li> </ul>
<b>Part B:</b>
<ul style="list-style-type: none"> <li>Any internal MCO code for LMP or EDD with an obstetrical history</li> <li>Any internal MCO code for LMP or EDD with risk assessment and counseling/education</li> </ul>

**Table PPC-D**

Marker Event
Any visit to an OB/GYN, family practitioner or other primary care practitioner with either an ultrasound or a principal diagnosis of pregnancy.
<b>Administrative</b>
The member must meet criteria in Part A <b>and</b> Part B.
<b>Part A:</b> Any one code.
<ul style="list-style-type: none"> <li><b>CPT code:</b> 59400*, 59510*, 59610*, 59618*, 59425*, 59426*, 99201-99205, 99211-99215</li> <li><b>UB-92 Revenue code:</b> 514</li> <li><b>CPT Category II code:</b> 0500F, 0501F, 0502F</li> </ul>
<b>Part B:</b> Any one code.
<ul style="list-style-type: none"> <li><b>CPT code:</b> 76801, 76802, 76805, 76810, 76811, 76812, 76815, 76816, 76817, 76818</li> <li><b>ICD-9-CM code</b> (must be principal diagnosis): 640.x3, 641.x3, 642.x3, 643.x3, 644.x3, 645.x3, 646.x3, 647.x3, 648.x3, 651.x3, 652.x3, 653.x3, 654.x3, 655.x3, 656.x3, 657.x3, 658.x3, 659.x3</li> <li><b>ICD-9-CM V code:</b> V22-V23, V28</li> <li><b>UB-92 Occurrence code:</b> 10</li> </ul>

<b>Postpartum care</b>	A postpartum visit (the following codes) for a pelvic exam or postpartum care on or between 21 and 56 days after delivery.  57170, 58300, 59400*, 59410*, 59430, 59510*, 59515*, 59610*, 59614*, 59618*, 59622*, 88141-88145, 88147, 88148, 88150, 88152-88155, 88164-88167, 88174, 88175, 0503F, 10524-7, 18500-9, 19762-4, 19764-0, 19765-7, 19766-5, 19774-9, 33717-0, 91.46, V24.1, V24.2, V25.1, V72.3, V76.2, 0923 <i>*Generally, these codes are used on the date of delivery, not on the date of the postpartum visit, so this code may be used only if the claim form indicates when postpartum care was rendered</i>
<b>III. Hybrid Specification</b>	
<b>Denominator</b>	A systematic sample drawn from the eligible population for each product line. The MCO may reduce the sample size using the current year's lowest product line-specific administrative rate of these two indicators and the >81% indicator from Frequency of Ongoing Prenatal Care or the prior year's lowest audited product line-specific rate for these two indicators and the >81% indicator from Frequency of Ongoing Prenatal Care.
<b>Numerator</b>	
<b>Timeliness of prenatal care</b>	A prenatal visit in the first trimester or within 42 days of enrollment, depending on the date of enrollment in the MCO and any gaps in enrollment during the pregnancy. Includes only visits that occur while the member was enrolled.
<b>Administrative</b>	Refer to the <i>Administrative Specification</i> above to identify positive numerator hits from the administrative data.
<b>Medical Record</b>	Documentation in medical record must identify one of the following:  <i>Prenatal care visits to an OB/GYN practitioner or midwife.</i> Documentation in the medical record must include a note indicating the date on which the prenatal care visits occurred, and evidence of <i>one</i> of the following: <ul style="list-style-type: none"><li>• a basic physical obstetrical examination that includes auscultation for fetal heart tone, <b>or</b> pelvic exam with obstetric observations, <b>or</b> measurement of fundus height (a standardized prenatal OB form may be used), <b>or</b></li><li>• evidence that a prenatal care procedure was performed, such as:<ul style="list-style-type: none"><li>– a screening test in the form of an obstetric panel (e.g., hematocrit, differential WBC count, platelet count, hepatitis B surface antigen, rubella antibody, syphilis test, RBC antibody screen, Rh[D] and ABO blood typing)</li><li>– TORCH antibody panel alone or a rubella antibody test/titer with an Rh incompatibility (ABO/Rh) blood typing</li></ul></li><li>• echography of a pregnant uterus, <b>or</b> documentation of LMP or EDD in conjunction with <i>either</i>:<ul style="list-style-type: none"><li>– prenatal risk assessment and counseling/education</li><li>– a complete obstetrical history, <b>or</b></li></ul></li><li>• for members whose last enrollment segment was after 219 days prior to delivery:<ul style="list-style-type: none"><li>– any visit to an OB/GYN, family practitioner or other primary care practitioner with a principal diagnosis of pregnancy.</li></ul></li></ul> <i>Prenatal care visits to a family practitioner or other primary care practitioner.</i> Documentation in the medical record must include a note indicating the date on which the prenatal care visits occurred, with diagnosis of pregnancy and evidence of <i>one</i> of the following: <ul style="list-style-type: none"><li>• a basic physical obstetrical examination that includes auscultation for fetal heart tone, <b>or</b> pelvic exam with obstetric observations <b>or</b> measurement of fundus height (a standardized prenatal OB form may be used), <b>or</b></li><li>• evidence that a prenatal care procedure was performed, such as:<ul style="list-style-type: none"><li>– a screening test in the form of an obstetric panel</li></ul></li></ul>

	<ul style="list-style-type: none"><li>– a rubella antibody test/titer with an Rh incompatibility (ABO/Rh) blood typing</li><li>– TORCH antibody panel</li><li>– echography of a pregnant uterus, <b>or</b></li></ul> <ul style="list-style-type: none"><li>• evidence that a diagnosis of pregnancy has been established in the form of a documented LMP or EDD in conjunction with <i>either</i>:</li><li>– a complete obstetrical history</li><li>– a prenatal risk assessment and counseling/education, <b>or</b></li></ul> <ul style="list-style-type: none"><li>• for members whose last enrollment segment was after 219 days prior to delivery:</li><li>– any visit to an OB/GYN, family practitioner, or other primary care practitioner with a principal diagnosis of pregnancy.</li></ul>
<b>Postpartum care</b>	A postpartum visit for a pelvic exam or postpartum care on or between 21 and 56 days after delivery, as documented through either administrative data or medical record review.
<b>Administrative</b>	Refer to the <i>Administrative Specification</i> above to identify positive numerator hits from the administrative data.
<b>Medical record</b>	Documentation in the medical record must include a note indicating the date on which a postpartum visit occurred and <i>one of the following</i> : <ul style="list-style-type: none"><li>• a pelvic exam, <b>or</b></li><li>• an evaluation of weight, blood pressure, breasts and abdomen, <b>or</b></li><li>• a notation of "postpartum care."</li></ul>

An MCO that submits HEDIS data to NCQA must provide the following data elements:

**Table 5 - Data Elements for Prenatal and Postpartum Care**

	Administrative	Hybrid
Measurement year	x	x
Data collection methodology (administrative or hybrid)	x	x
Sampling method used		x
Eligible population	x	x
Number of numerator events by administrative data in eligible population (before exclusions)		x
Current year's administrative rate (before exclusions)		x
Minimum required sample size (MRSS) or other sample size		x
Oversampling rate		x
Final sample size (FSS)		x
Number of numerator events by administrative data in FSS		x
Administrative rate on FSS		x
Number of original sample records excluded because of valid data errors		x
Number of records excluded because of contraindications identified through administrative data		x
Number of records excluded because of contraindications identified through medical record review		x
Number of employee/dependent medical records excluded		x
Records added from the oversample list		x
Denominator		x
Numerator events by administrative data	x	x
Numerator events by medical records		x
Reported rate	x	x
Lower 95% confidence interval	x	x
Upper 95% confidence interval	x	x

Source: National Committee for Quality Assurance (2005). *HEDIS 2006, Volume 2: Technical Specifications*. Washington, D.C.: NCQA.



## HEDIS 2006 WELL-CHILD VISITS IN THE THIRD, FOURTH, FIFTH AND SIXTH YEARS OF LIFE (W34)

The following is the definition of the Well Child Visits measure, a Use of Services measure as defined by NCQA.

*The percentage of members who were three, four, five or six years of age during the measurement year who received one or more well-child visits with a primary care practitioner during the measurement year.*

**Table 6 - HEDIS 2006 Technical Specifications for Well-Child Visits in the 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> Years of Life (W34)**

<b>I. Eligible Population</b>	
<b>Product lines</b>	Commercial, Medicaid (report each product line separately).
<b>Ages</b>	3–6 years as of December 31 of the measurement year.
<b>Continuous enrollment</b>	The measurement year.
<b>Allowable gap</b>	No more than one gap in enrollment of up to 45 days during the continuous enrollment period. To determine continuous enrollment for a Medicaid member for whom enrollment is verified monthly, the member may not have more than 1-month gap in coverage (i.e., a member whose coverage lapses for 2 months [60 days] is not considered continuously enrolled).
<b>Anchor date</b>	Enrolled as of December 31 of the measurement year.
<b>Benefit</b>	Medical.
<b>Event/diagnosis</b>	None.
<b>II. Administrative Specification</b>	
<b>Denominator</b>	The eligible population.
<b>Numerators</b>	At least one well-child visit with a primary care practitioner during the measurement year. The primary care practitioner does not have to be the practitioner assigned to the child. A child who had a claim/encounter from a primary care practitioner with one of the codes listed below is considered to have received a well-child visit:  99382, 99383, 99392, 99393, V20.2, V70.0, V70.3, V70.5, V70.6, V70.8, V70.9
<b>III. Hybrid Specifications</b>	
<b>Denominator</b>	A systematic sample drawn from the MCO's eligible population. The MCO may reduce its sample size using the current year's administrative rate or the prior years audited, product line-specific rate.  <b>Note:</b> For information on reducing sample size, refer to the Guidelines for Calculations and Sampling.
<b>Numerator</b>	At least one well-child visit with a primary care practitioner during the measurement year. The primary care practitioner, however, does not have to be the practitioner assigned to the child.  <b>Note:</b> The MCO should refer to the Practitioner Turnover measure for the definition of primary care practitioner. The MCO may also count visits to physician assistants and nurse practitioners in primary care practitioner offices, even if the practitioner is not listed as a primary care practitioner in the MCO directory, as long as the practitioner provided any service specified in Table W34-A.

<b>Administrative</b>	Refer to the <i>Administrative Specification</i> above to identify positive numerator hits from the administrative data.
<b>Medical record</b>	<p>Documentation must include a note indicating a visit to a primary care practitioner, the date on which the well-child visit occurred and evidence of all of the following:</p> <ul style="list-style-type: none"> <li>• a health and developmental history (physical and mental)</li> <li>• a physical exam</li> <li>• health education/anticipatory guidance.</li> </ul>

Source: National Committee for Quality Assurance (2005). HEDIS 2006, Volume 2: Technical Specifications. Washington, D.C.: NCQA.

An MCO that submits HEDIS data to NCQA must provide the following data elements:

**Table 7 - Data Elements for Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life**

	<b>Administrative</b>	<b>Hybrid</b>
Measurement year	x	x
Data collection methodology (administrative or hybrid)	x	x
Sampling method used		x
Eligible population	x	x
Number of numerator events by administrative data in eligible population (before exclusions)		x
Current year's administrative rate (before exclusions)		x
Minimum required sample size (MRSS) or other sample size		x
Oversampling rate		x
Final sample size (FSS)		x
Number of numerator events by administrative data in FSS		x
Administrative rate on FSS		x
Number of original sample records excluded because of valid data errors		x
Number of records excluded because of contraindications identified through administrative data		x
Number of records excluded because of contraindications identified through medical record review		x
Number of employee/dependent medical records excluded		x
Records added from the oversample list		x
Denominator		x
Numerator events by administrative data	x	x
Numerator events by medical records		x
Reported rate	x	x
Lower 95% confidence interval	x	x

Source: National Committee for Quality Assurance (20056). HEDIS 2006, Volume 2: Technical Specifications. Washington, D.C.: NCQA.



## HEDIS 2006 FOLLOW-UP AFTER HOSPITALIZATION FOR MENTAL ILLNESS (FUH)

The following is the definition of the Follow-Up After Hospitalization measure, an Effectiveness of Care measure as defined by NCQA.

*The percentage of discharges for members 6 years of age and older who were hospitalized for treatment of selected mental health disorders and who were seen on an ambulatory basis or were in intermediate treatment with a mental health provider.*

**Table 8 - HEDIS 2006 Technical Specifications for Follow-Up After Hospitalization for Mental Illness (FUH)**

<b>I. Eligible Population</b>	
<b>Product lines</b>	Commercial, Medicaid, Medicare (report each product line separately).
<b>Ages</b>	6 years and older as of the date of discharge.
<b>Continuous enrollment</b>	Date of discharge through 30 days after discharge.
<b>Allowable gap</b>	No gaps in enrollment.
<b>Anchor date</b>	None.
<b>Benefits</b>	Medical and mental health (inpatient and ambulatory).
<b>Event/diagnosis</b>	Discharged from an inpatient setting of an acute care facility (including acute care psychiatric facilities) with a discharge date occurring on or before December 1 of the measurement year and a principal ICD-9-CM diagnosis code indicating a mental health disorder specified below:  295–299, 300.3, 300.4, 301, 308, 309, 311–314, 426, 430  The MCO should not count discharges from nonacute care facilities (e.g., residential care or rehabilitation stays).
<b>Multiple discharges</b>	A member with more than one discharge on or before December 1 of the measurement year with a principal diagnosis of one of the selected mental health disorders listed above could be counted more than once in the eligible population.
<b>Mental health readmission or direct transfer</b>	If the discharge for a selected mental health disorder is followed by a readmission or by a direct transfer to an <i>acute facility</i> for any mental health principal diagnosis within the 30-day follow-up period, only the readmission discharge or the discharge from the facility to which the member was transferred is counted.  Although re-hospitalization might not be for one of the selected mental health disorders, it is probably for a related condition. Only readmissions with a discharge date that occurs on or before December 1 of the measurement year are included in the measure. Refer to the ICD-9-CM codes listed in Table MIP-A.  Exclude from the denominator of this measure discharges followed by a readmission or a direct transfer to a <i>nonacute facility</i> for any mental health principal diagnosis within the 30-day follow-up period. These discharges are excluded from the measure, because the readmission or the transfer may prevent an ambulatory follow-up visit from taking place (see Table NON-A for the definition of <b>nonacute care</b> ).
<b>Non-mental-health readmission or direct transfer</b>	Exclude from the denominator of this measure discharges in which the patient was transferred directly or readmitted within 30 days after discharge to an acute or nonacute facility for a non-mental health principal diagnosis. These discharges are excluded from the measure, because the re-hospitalization or the transfer may prevent an ambulatory follow-up visit from taking place.

<b>Denied claims</b>	Denials of inpatient care (e.g., those resulting from members failing to get proper authorization) are not excluded from the measure.
<b>II. Administrative Specification</b>	
<b>Denominator</b>	The eligible population.  <b>Note:</b> The eligible population for this measure is based on discharges, not members. This method differs from the way the eligible population is defined for other HEDIS measures. It is possible for the denominator for this measure to contain multiple discharge records for the same individual.  If multiple discharges occur within 30 days of each other, use the last discharge. If multiple discharges occur more than 30 days apart, use all discharges.
<b>Numerators</b>	An ambulatory mental health encounter or intermediate treatment with a mental health practitioner within the specified time period. For each denominator event (discharges), the follow-up visit must occur after the applicable discharge. An outpatient visit on the date of discharge should be included in the measure.
<b>30-day follow-up</b>	An ambulatory follow-up encounter with a mental health practitioner on the date of discharge, or up to 30 days after hospital discharge. To identify ambulatory follow-up encounters, use the following codes: 90801, 90802, 90804-90819, 90821-90824, 90826-90829, 90845, 90847, 90849, 90853, 90857, 90862, 90870, 90871, 90875-90876, 99201-99205, 99211-99215, 99241-99245, 99341-99345, 99347-99350, 99383-99387, 99393-99397, 99401-99404, 0513, 0900, 0901, 0905-0907, 0909-0916, 0961
<b>7-day follow-up</b>	An ambulatory follow-up encounter with a mental health practitioner on the date of discharge, or up to 7 days after hospital discharge. To identify ambulatory follow-up encounters, use the following codes: 90801, 90802, 90804-90819, 90821-90824, 90826-90829, 90845, 90847, 90849, 90853, 90857, 90862, 90870, 90871, 90875-90876, 99201-99205, 99211-99215, 99241-99245, 99341-99345, 99347-99350, 99383-99387, 99393-99397, 99401-99404, 0513, 0900, 0901, 0905-0907, 0909-0916, 0961
<b>III. Hybrid Specification</b>	
None.	

An MCO that submits HEDIS data to NCQA must provide the following data elements:

**Table 9 - Data Elements for Follow-Up After Hospitalization for Mental Illness**

	<b>Administrative</b>
Measurement year	x
Data collection methodology (administrative)	x
Eligible population	x
Numerator events by administrative data	<i>Each of the 2 rates</i>
Reported rate	<i>Each of the 2 rates</i>
Lower 95% confidence interval	<i>Each of the 2 rates</i>
Upper 95% confidence interval	<i>Each of the 2 rates</i>

Source: National Committee for Quality Assurance (2005). HEDIS 2006, Volume 2: Technical Specifications. Washington, D.C.: NCQA.



## METHODS OF CALCULATING PERFORMANCE MEASURES

According to HEDIS technical specifications, there are two methods of calculating performance measures: 1) the Administrative Method and 2) the Hybrid Method. The Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life and the Prenatal and Postpartum Care measures permit the MCO to calculate the percentages (also referred to as rates) using either the Administrative Method or the Hybrid Method. The Follow-Up After Hospitalization for Mental Illness measure is calculated using only the Administrative Method.

The Administrative Method involves examining claims and other databases (administrative data) to calculate the number of members in the entire eligible population who received a particular service (e.g., well-child visits, prenatal/postpartum visits or follow-up visits). The eligible population is defined by the HEDIS technical specifications. Those cases in which administrative data show that the member received the service(s) examined are considered “hits”, or “administrative hits.” The HEDIS technical specifications provide acceptable administrative codes for identifying an administrative hit.

The Hybrid Method entails the selection of a random sample of members from the eligible population during the measurement year. For the Hybrid Method, administrative data are examined to select members eligible for the measure and to identify the number of members who received the service(s) as evidenced by a claim submission or through external sources of administrative data (e.g., State Public Health Agency Vital Statistics or Immunization Registry databases). Those cases in which there are no administrative data indicating that the member received the service or all of the services required to be an “administrative hit” are identified for medical record review. Documentation of all or some of the services in the medical record in combination with administrative data is considered a “hybrid hit.”

Administrative hits and hybrid hits are summed to form the numerator of the rate of members receiving the service of interest (e.g., appropriate doctor’s visit). The denominator of the rate is represented by the eligible population or those sampled from the eligible population. A simple formula of dividing the numerator into the denominator produces the rate reported to the SMA and the SPHA, expressed in percentages. There are a number of other specifications for sampling, oversampling, replacement, and treatment of contraindications for services that are further

explained in the HEDIS 2006 Technical Specifications: Volume 2<sup>11</sup>, to which the interested reader is referred.

## TIME FRAME

According to the HEDIS technical specifications, the time frame for including members in the eligible population or sample was the measurement year of calendar year (CY) 2005 for all the measures selected. The time frame for the events of interest (e.g., appropriate doctor's visits) was CY2004 and CY2005.

## PROCEDURES FOR DATA COLLECTION

The HEDIS 2006 technical specifications for each measure validated were reviewed by the EQRO Project Director, EQRO Research Analyst, and a health management informatics consultant.

Extensive training in data management and programming for healthcare quality indices, clinical training, research methods, and statistical analysis expertise were well represented among the personnel involved in adapting and implementing the Validating of Performance Measures Protocol to conform to the HEDIS, SMA, and SPHA requirements while maintaining consistency with the Validating Performance Measures Protocol. The following sections describe the procedures for each activity in the Validating Performance Measures Protocol as they were implemented for the three HEDIS 2006 measures validated.

### Pre-On-Site Activity One: Reviewer Worksheets

Reviewer Worksheets were developed for the purpose of conducting activities and recording observations and comments for follow-up at the site visits. HEDIS 2006 technical specifications were used to refine the Reviewer Worksheets for the evaluation of each item. Throughout November and December 2006, project personnel met to review available source documents and develop the Reviewer Worksheets for conducting pre-on-site, on-site, and post-on-site activities as described below. The reviews formed the basis for completing the Attachments (V, VII, X, XII, XIII, and XV) of the CMS Validating Performance Measures Protocol for each measure and MC+ MCO.

Source documents used to develop the methods for review and complete the Attachments included:

- Information Systems Capabilities Assessments (ISCA) developed by the SMA and completed by the MCOs during 2006
- HEDIS 2006 Data Submission Tool (DST)
- HEDIS 2006 Baseline Assessment Tool (BAT)

<sup>11</sup> National Committee for Quality Assurance (2006). HEDIS 2006, Volume 2: Technical Specifications. Washington, D.C.: NCQA.

- HEDIS 2006 Audit Report
- HEDIS 2006 SPHA Reports

### **Pre-On-Site Activity Two: Preparation of MC+ MCOs**

Presentations, MC+ MCO orientation teleconference calls, and individual communications with personnel at MC+ MCOs responsible for HEDIS 2006 performance measure calculation were conducted between November 2006 and June 2007, with follow-up telephone calls and written communications continuing through July 2007. From November 6, 2006 through November 17, 2006, the EQRO conducted technical assistance orientation phone calls with each of the MC+ MCOs to provide education about the Validating of Performance Measures Protocol and the EQRO submission requirements. All written materials, letters and instructions were reviewed and approved by the SMA in advance. Technical objectives, methods, procedures, data sources, communication with the EQRO, and contact information for EQRO personnel were provided to MC+ MCOs prior to the teleconference calls. MC+ MCOs were requested to have in attendance the person(s) responsible for the calculation of the HEDIS 2006 performance measures validated. Teleconference meetings were led by the EQRO Project Director, with key project personnel and a representative from the SMA in attendance. Technical assistance was focused on describing the Validating Performance Measures Protocol; identifying the three measures validated; the purpose, activities and objectives of the EQRO; and defining the information and data needed for the EQRO to validate the performance measures.

On November 27, 2006, formal written requests for data and information from the MC+ MCOs for the validation of performance measures were made by the EQRO, to be submitted by MC+ MCOs by January 5, 2007 (see Appendix 3). A separate written request was sent to the MC+ MCOs on January 29, 2007 requesting medical records be submitted to the EQRO for a sample of cases. These records were to be submitted by the providers to the EQRO by March 12, 2007. Detailed letters and instructions were mailed to QI/UM Coordinators and Medicaid Plan Administrators explaining the type of information, purpose, and format of submissions. EQRO personnel were available and responded to electronic mail and telephone inquiries; and any requested clarifications throughout the evaluation process. The following are the data and documents requested from MC+ MCOs for the Validating Performance Measures Protocol:

- HEDIS 2006 Data Submission Tool for all three measures for the MC+ Managed Care Population only.
- 2006 HEDIS Audit Report.

- Baseline Assessment Tool for HEDIS 2006.
- List of cases for denominator with all HEDIS 2006 data elements specified in the measures.
- List of cases for numerators with all HEDIS 2006 data elements specified in the measures, including fields for claims data and MOHSAIC, or other administrative data used.
- All worksheets, memos, minutes, documentation, policies and communications within the MCO and with HEDIS auditors regarding the calculation of the selected measures.
- List of cases for which medical records were reviewed, with all HEDIS 2006 data elements specified in the measures.
- Sample medical record tools used for hybrid methods for the three HEDIS 2006 measures for the MC+ Managed Care Program population; and instructions for reviewers.
- Policies, procedures, data and information used to produce numerators and denominators.
- Policies, procedures, and data used to implement sampling (if sampling was used). At a minimum, this should include documentation to facilitate evaluation of:
  - Statistical testing of results and any corrections or adjustments made after processing.
  - Description of sampling techniques and documentation that assures the reviewer that samples used for baseline and repeat measurements of the performance measures were chosen using the same sampling frame and methodology.
  - Documentation of calculation for changes in performance from previous periods (if comparisons were made), including tests of statistical significance.
- Policies and procedures for mapping non-standard codes.
- Record and file formats and descriptions for entry, intermediate, and repository files.
- Electronic transmission procedures documentation. (This will apply if MCO sends or receives data electronically from vendors performing the HEDIS abstractions, calculations or data entry.)
- Descriptive documentation for data entry, transfer, and manipulation programs and processes.
- Samples of data from repository and transaction files to assess accuracy and completeness of the transfer process.
- Documentation of proper run controls and of staff review of report runs.
- Documentation of results of statistical tests and any corrections or adjustments to data along with justification for such changes.
- Documentation of sources of any supporting external data or prior years' data used in reporting.
- Procedures to identify, track, and link member enrollment by product line, product, geographic area, age, sex, member months, and member years.
- Procedures to track individual members through enrollment, disenrollment, and possible re-enrollment.

- Procedures used to link member months to member age.
- Documentation of “frozen” or archived files from which the samples were drawn, and if applicable, documentation of the MCO’s process to re-draw a sample or obtain necessary replacements.
- Procedures to capture data that may reside outside the MCO’s data sets (e.g. MOHSAIC).
- Policies, procedures, and materials that evidence proper training, supervision, and adequate tools for medical record abstraction tasks. (May include training material, checks of inter-rater reliability, etc.)

### **Pre-On-Site Activity Three: Assess the Integrity of the MCO's Information System**

The objective of this activity was to assess the integrity of the MC+ MCOs’ ability to link data from multiple sources. Once the Reviewer Worksheets were developed, EQRO personnel reviewed the SMA-developed and administered Information Systems Capability Assessment (ISCA). The protocols require an ISCA to be administered every other year; the 2006 review year required a full ISCA assessment. As such, all MCOs were required to submit new information for the ISCA review this year. The ISCA submissions were thoroughly reviewed and evaluated by the EQRO. EQRO personnel also reviewed HEDIS 2006 Baseline Assessment Tool (BAT) submitted by each MC+ MCO. Detailed notes and follow-up questions were formulated for the site visit reviews.

### **On-Site Activity One: Assess Data Integration and Control**

The objective of this activity was to assess the MC+ MCOs’ ability to link data from multiple sources and assess whether these abilities ensure the accuracy of the measures. The site visit activities addressed a series of technical, process, and competency reviews with MC+ MCO personnel (including management and technical staff) and vendors involved in the development and production of the HEDIS 2006 performance measures. The site visit activities examined the HEDIS 2006 reporting processes, databases, software and vendors for the three measures validated. This included reviewing data processing issues for generating the rates and determining the numerator and denominator counts. Other activities involved reviewing database processing systems, software, organizational reporting structures, and sampling methods. The following are the activities conducted at each MC+ MCO:

- Review results of run queries (on-site observation, screen-shots, test output)
- Examination of data fields for numerator & denominator calculation (examine field definitions and file content)
- Review of applications, data formats, flowcharts, edit checks and file layouts
- Review of source code, software certification reports
- Review HEDIS repository procedures, software manuals

- Test for code capture within system for measures (confirm principal & secondary codes, presence/absence of non-standard codes)
- Review of operating reports
- Review information system policies (data control, disaster recovery)
- Review vendor associations & contracts

The following are the interview questions developed for the site visits:

- What are the processes of data integration and control within information systems?
- What documentation processes are present for collection of data, steps taken and procedures to calculate the HEDIS measures?
- What processes are used to produce denominators?
- What processes are used to produce numerators?
- How is sampling done for calculation of rates produced by the hybrid method?
- How does the MCO submit the requirement performance reports to the State?

From the site visit activities, interviews, and document reviews, CMS Protocol Validating Performance Measures Attachment V (Data Integration and Control Findings) was completed for each MC+ MCO and performance measure validated.

### **On-Site Activity Two: Assess Documentation of Data and Processes Used to Calculate and Report Performance Measures**

The objectives of this activity were to assess the documentation of data collection, assess the process of integrating data into a performance measure set, and examine procedures used to query the data set to identify numerators, denominators, generate a sample, and apply proper algorithms.

From the site visit activities, interviews, review of numerator and denominator files and document reviews, CMS Protocol Validating Performance Measures Attachment VII (Data and Processes Used to Calculate and Report Performance) was completed for each MC+ MCO and measure validated. One limitation of this step was the inability of MC+ MCOs to provide documentation of processes used to calculate and report the performance measures due to the use of proprietary software or off-site vendor software and claims systems.

### **On-Site Activity Three: Assess Processes Used to Produce the Denominators**

The objectives of this activity were: 1) to determine the extent to which all eligible members were included; 2) to evaluate programming logic and source codes relevant to each measure; and 3) to evaluate eligibility, enrollment, age, codes, and specifications related to each performance measure.

The content and quality of the data files submitted were reviewed to facilitate the evaluation of compliance with the HEDIS 2006 technical specifications. The MC+ MCOs consistently submitted the requested level of data (e.g., all elements required by the measures or information on hybrid or administrative data). In order to produce meaningful results, the EQRO required that all the MC+ MCOs submit data in the format requested. All MC+ MCOs submitted the data requested in the proper format.

From the site visit activities, interviews, review of numerator and denominator files and document reviews, CMS Protocol Validating Performance Measures Attachment X (Denominator Validation Findings) was completed for each MC+ MCO and performance measure validated.

#### **On-Site Activity Four: Assess Processes Used to Produce the Numerators**

The objectives of this activity were: 1) evaluate the MC+ MCOs' ability to accurately identify medical events (e.g., appropriate doctor's visits); 2) evaluate the MCOs' ability to identify events from other sources (e.g., medical records, State Public Immunization Registry); 3) assess the use of codes for medical events; 4) evaluate procedures for non-duplication of event counting; 5) examine time parameters; 6) review the use of non-standard codes and maps; 7) identify medical record review procedures (Hybrid Method); and 8) review the process of integrating administrative and medical record data.

For the Administrative Method, validation of the numerators was conducted for all three measures using the specified parameters for the dates of service(s), diagnosis codes, and procedure codes as appropriate to the respective measures. For example, for the Well-Child measure, dates of service were required to occur between January 1, 2005 and December 31, 2005. Cases with dates outside this range were considered not valid. Similar validation was conducted for all three measures reviewed.

Validation of numerators for the Hybrid Method followed the Validating Performance Measures Protocol for sample selection and calculation of bias related to the medical record review. The Protocol requires the EQRO to sample up to 30 records from the medical records reported by the MC+ MCO as meeting the numerator criteria (hybrid hits). In the event that the MC+ MCO reported fewer than 30 numerator events from medical records, the EQRO requested all medical records that were reported by the MC+ MCO as meeting the numerator criteria. This approach

does not apply to the Follow-Up After Hospitalization for Mental Illness measure, as the Administrative Method of calculation is required for this measure by HEDIS technical specifications.

Initial requests for documents and data were made on November 27, 2006, with submissions due to the EQRO by January 5, 2007. The EQRO required the MC+ MCOs to request medical records from the providers. On January 29, 2007, the MC+ MCOs were given a list of medical records to request, a letter from DMS explaining the purpose of the request, and the information necessary for the providers to send the medical records directly to the EQRO. The submission deadline for medical records was March 12, 2007. The record receipt rate was excellent; of the 101 records contained in the sample, 100 of them were received by the EQRO for review.

The review of medical records was administered by Reliable Health Care, Inc. (RHC), a temporary healthcare services provider located in Kansas City, Missouri and a Business Associate of Behavioral Health Concepts, Inc., (the EQRO). RHC is a State of Missouri certified Minority-Owned Business Enterprise (MBE) operated by two registered nurses. RHC possesses expertise in recruiting nursing and professional health care staff for clinical, administrative, and HEDIS medical record review services. The review of medical records was conducted by RNs with over 20 years of clinical experience and who were currently licensed and practicing in the State of Missouri. Two RNs participated in the training and medical record review process and both had at least three years of experience conducting medical record reviews for HEDIS measures.

Medical record abstraction tools for the Prenatal and Postpartum Care and Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life measures were developed by the EQRO Project Director and revised in consultation with a nurse consultant, the EQRO Research Analyst and with the input from the nurse reviewers. The 2006 HEDIS technical specifications and the Validating Performance Measures Protocol criteria were used to develop the medical record review tools and data analysis plan. A medical record review manual and documentation of ongoing reviewer questions and resolutions were developed for the review. A half day of training was conducted by the EQRO Project Director and staff on March 19, 2007 using sample medical record tools and reviewing all responses with feedback and discussion. The reviewer training and training manual covered content areas such as Health Insurance Portability and Accountability Act (HIPAA), confidentiality, conflict of interest, review tools, and project background. Teleconference meetings between the nurses, coders, and EQRO Project Director were conducted as needed to resolve questions and coding discrepancies throughout the duration of the medical record review process.

A data entry format with validation parameters was developed for accurate medical record review data entry. A data entry manual and training were provided to the data entry person at RHC, Inc. Data was reviewed weekly for accuracy and completeness, with feedback and corrections made to the data entry person. The final databases were reviewed for validity, verified, and corrected prior to performing analyses. All data analyses were developed, reviewed, approved, and finalized by the EQRO Project Director. CMS Protocol Validating Performance Measures Attachments XII (Impact of Medical Record Findings) and XIII (Numerator Validation Findings) were completed based on the medical record review of documents and site visit interviews.

### **On-Site Activity Five: Assess Sampling Process (Hybrid Method)**

The objective of this activity was to assess the representativeness of the sample of care provided.

- Review Information Systems Capability Assessment (ISCA)
- Review HEDIS Baseline Assessment Tool (BAT)
- Review Data Submission Tool (DST)
- Review numerator and denominator files
- Conduct medical record review for measures calculated using hybrid methodology
- Determine the extent to which the record extract files are consistent with the data found in the medical records
- Review of medical record abstraction tools and instructions
- Conduct on-site interviews, activities, and review of additional documentation
- For those MCOs that calculated the Prenatal and Postpartum Care and/or Well-Child Visits measures via hybrid methodology, a sample of medical records (up to 30) was conducted to validate the presence of immunizations that contributed to the numerator.

From the review of documents and site visits, CMS Protocol Validating Performance Measures Attachment XV (Sampling Validation Findings) was completed for those MC+ MCOs that elected the Hybrid Method for the HEDIS 2006 Prenatal and Postpartum Care and the HEDIS 2006 Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life measure.

### **On-Site Activity Six: Assess Submission of Required Performance Measures to State**

The objective of this activity was to assure proper submission of findings to the SMA and SPHA. The DST was obtained from the SPHA to determine the submission of the performance measures validated. Conversations with the SPHA representative responsible for compiling the measures for all MCOs in the State occurred with the EQRO Project Director to clarify questions, obtain data, and follow-up on MC+ MCO submission status.

**Post- On-Site Activity One: Determine Preliminary Validation Findings for each Measure****Calculation of Bias**

The Validating Performance Measures Protocol specifies the method for calculating bias based on medical record review for the Hybrid Method. In addition to examining bias based on the medical record review and the Hybrid Method, the EQRO calculated bias related to the inappropriate inclusion of cases with administrative data that fell outside the parameters described in the HEDIS 2006 technical specifications. For measures calculated using the Administrative Method, the EQRO examined the numerators and denominators for correct date ranges for dates of birth and dates of service as well as correct enrollment periods and codes used to identify the medical events. This was conducted as described above under on-site activities three and four. The estimated bias in the calculation of the HEDIS 2006 measures for the Hybrid Method was calculated using the following procedures, methods and formulas, consistent with the Validating Performance Measures Protocol. Specific analytic procedures are described in the following section.

**Analysis**

Once the medical record review was complete, all administrative data provided by the MC+ MCOs in their data file submissions for the HEDIS 2006 Prenatal and Postpartum Care measure were combined with the medical record review data collected by the EQRO. This allowed for calculation of the final rate by the EQRO for both categories (Prenatal Care and Postpartum Visits) in this measure. Any member meeting the criteria for a prenatal “hit” was counted in the calculation of the prenatal rate, even if the same member did not meet all the criteria for a postpartum “hit”. Conversely, a member was counted in the calculation of the postpartum rate if all criteria were met, even if the same member did not meet all the criteria for a prenatal “hit”. The member was counted in both categories if all criteria were met.

For the HEDIS 2006 Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life measure, all administrative data provided by the MC+ MCOs in their data file submissions were combined with the medical record findings collected by the EQRO. This allowed for calculation of the final rate. In order for each event of a well-child visit to be met, there had to be documented evidence of an appropriate well-child visit code as defined in the HEDIS 2006 technical specifications; sick visits or emergency room codes were not included. Only one well-child visit in the measurement year was required for a member to be considered a positive “hit”. Multiple well-child visits for one member within the measurement year were excluded; each member was only counted once.

For the calculation of bias based on medical record review for the MC+ MCOs using the Hybrid Method for the HEDIS 2006 Prenatal and Postpartum Care and Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life measures, several steps were taken. First, the number of hits based on the medical record review was reported (Medical Records Validated by EQRO). Second, the Accuracy (number of Medical Records able to be validated by EQRO/total number of Medical Records requested by the EQRO for audit) and Error Rates (100% - Accuracy Rate) were determined. Third, a weight for each Medical Record was calculated (100%/denominator reported by the MCO) as specified by the Protocol. The number of False Positive Records was calculated (Error Rate \* numerator hits from Medical Records reported by the MCO). This represents the number of records that were not able to be validated by the EQRO. The Estimated Bias from Medical Records was calculated (False Positive Rate \* Weight of Each Medical Record).

To calculate the Total Estimated Bias in the calculation of the performance measures, the Administrative Hits Validated by the EQRO (through the previously described file validation process) and the Medical Record Hits Validated by the EQRO (as described above) were summed and divided by the total Denominator reported by the MCO on the DST to determine the Rate Validated by the EQRO. The difference between the Rate Validated by the EQRO and the Rate Reported by the MC+ MCO to the SMA and SPHA was the Total Estimated Bias. A positive number reflects an overestimation of the rate by the MC+ MCO, while a negative number reflects an underestimation.

Once the EQRO concluded its on-site activities, the validation activity findings for each performance measure were aggregated. This involved the review and analysis of findings and CMS Protocol Validating Performance Measures Attachments produced for each performance measure selected for validation and for the MCO's Information System as a result of pre-on-site and on-site activities. The EQRO Project Director reviewed and finalized all ratings before submitting to the SMA for final ratings on all CMS Protocol Validating Performance Measures Attachments, and completed the Final Performance Measure Validation Worksheets for all measures validated for each of the MC+ MCOs. Ratings for each of the Worksheet items (0 = Not Met; 1 = Partially Met; 2 = Met) were summed for each worksheet and divided by the number of applicable items to form a rate for comparison to other MC+ MCOs. The worksheets for each measure were examined by the EQRO Project Director to complete the Final Audit Rating.

Below is a summary of the final audit rating definitions specified in the Protocol. Any measures not reported were considered “Not Valid.” A Total Estimated Bias outside the 95% upper or lower confidence limits of the measures as reported by the MC+ MCO on the DST was considered “Not Valid”.

<b>Fully Compliant:</b>	Measure was fully compliant with State (SMA and SPHA) specifications.
<b>Substantially Compliant:</b>	Measure was substantially compliant with State (SMA and SPHA) specifications and had only minor deviations that did not significantly bias the reported rate.
<b>Not Valid:</b>	Measure deviated from State specifications such that the reported rate was significantly biased. This designation is also assigned to measures for which the data provided to the EQRO could not be independently validated.
	‘Significantly Biased’ was defined by the EQRO as being outside the 95% confidence interval of the rate reported by the MC+ MCO on the HEDIS 2005 Data Submission Tool.

## 3.4 Findings

MC+ MCOs conduct the calculation of performance measures in collaboration with a variety of vendors and use a number of different management information systems to extract data for the calculation of measures. They are also required to undergo annual audits by NCQA-certified auditing firms that provide MC+ MCOs with recommendations for reporting or not reporting findings of specific measures to the NCQA. Regardless of the NCQA audit rating or rotation, MC+ MCOs are required to report the performance measures validated to the SMA and SPHA. Table 10 summarizes the names of HEDIS-certified software used, medical record vendors, and HEDIS auditors for each of the MC+ MCOs. Tables 11 and 12 show the method of calculation used by each MC+ MCO and the audit ratings assigned by the NCQA Auditors. This information was taken from the NCQA-certified Auditors’ reports and MC+ MCO’s self-report to the EQRO.

**Table 10 - HEDIS 2005 Software, Vendors, and Auditors for the HEDIS 2005 Measures**

<b>MC+ MCO</b>	<b>Name of Software</b>	<b>Name of Medical Record Vendor</b>	<b>Name of HEDIS 2006 Auditor</b>
Blue Advantage Plus of Kansas City	Software from ViPs, Inc. MedMeasures	QMark/HEDISHelp	Ernst & Young, LLP
Children's Mercy Family Health Partners	N/A	Children's Mercy Family Health Partners	HealthcareData.com, LLC
HealthCare USA	Quality Spectrum* HEDIS repository by Catalyst Technologies	Not Applicable. Do not use Hybrid Method.	HealthcareData.com, LLC
Mercy CarePlus	MS Access, MS Excel (Novasys)	QMark/HEDISHelp	Healthcare Research Associates
Missouri Care	Austin Provider Solutions	Missouri Care	Thomson MedStat
Harmony HealthPlan	CareEnhance Resource Management Software (CRMS) *	UNIVAL	HealthcareData.com, LLC

Note: \* NCQA-certified.

**Table 11 - Summary of Method of Calculation Reported and Validated by MC+ MCOs**

<b>MC+ MCO</b>	<b>Well-Child Visits in the 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> Years of Life</b>	<b>Prenatal and Postpartum Care</b>	<b>Follow-Up After Hospitalization for Mental Illness</b>
Blue Advantage Plus of Kansas City	Administrative	Administrative	Administrative
Children's Mercy Family Health Partners	Hybrid	Administrative	Hybrid
HealthCare USA	Administrative	Administrative	Administrative
Mercy CarePlus	Hybrid	Administrative	Administrative
Missouri Care	Hybrid	Administrative	Hybrid
Harmony Health Plan*	N/A	N/A	N/A

\*Harmony Health Plan did not provide services to the MC+ population during the review period, their contract with the SMA began on July 1, 2006.



**Table 12 - Audit Designations from NCQA-Certified Auditors**

<b>MC+ MCO</b>	<b>Audit Type</b>	<b>Well-Child Visits in the 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> Years of Life</b>	<b>Prenatal and Postpartum Care</b>	<b>Follow-Up After Hospitalization for Mental Illness</b>
Blue Advantage Plus of Kansas City	Partial	NA	NA	NA
Children's Mercy Family Health Partners	Partial	NA	NA	NA
HealthCare USA	Partial	*	*	*
Mercy CarePlus	Partial	NA	NA	NA
Missouri Care	Partial	NA	NA	NA

**Note:** NA = Measure not audited; NR = Measure not reported; R = Measure reportable; NCQA = National Committee for Quality Assurance.

**Source:** *MCO self-report and NCQA Audit Report for HEDIS 2006*

\*HCUSA did not submit a HEDIS 2006 Audit Report, the report submitted to the EQRO for review was the HEDIS 2005 Audit report.

The validation of each of the performance measures is discussed in the following sections with the findings from each validation activity described. Subsequent sections summarize the status of submission of the measures validated to the SMA and SPHA, the Final Audit Ratings, and conclusions.

## HEDIS 2006 PRENATAL AND POSTPARTUM CARE

### Data Integration and Control

The objective of this activity was to assess the MC+ MCOs' ability to link data from multiple sources. It is based on the integrity of the management information systems and the ability to ensure accuracy of the measures. For the HEDIS 2006 Prenatal and Postpartum Care measure, the sources of data included enrollment, eligibility, and claim files. Table 13 summarizes the findings of CMS Protocol Validating Performance Measures Attachment V (Data Integration and Control Findings). The rate of items that were met was calculated across MC+ MCOs and from the number of applicable items for each MC+ MCO. Of all the MC+ MCOs that calculated the measure, 100% Met all criteria for every audit element. As such, each MC+ MCO Met 100% of the criteria for data integration and control.

**Table I3 - Data Integration and Control Findings, HEDIS 2006 Prenatal and Postpartum Care Measure**

Item	Audit Elements	MC+ MCO					All MC+ MCOs				
		BA+	CMFHP	HCUSA	MCP	MOCare	Number Met	Number Partially Met	Number Not Met	Number Applicable	Rate Met
5.1	MCO/PIHP processes accurately and completely transfer data from the transaction files (e.g., membership, provider, encounter/claims) into the repository used to keep the data until the calculations of the performance measures have been completed and validated.	2	2	2	2	2	5	0	0	5	100.0%
5.2	Samples of data from repository are complete and accurate.	2	2	2	2	2	5	0	0	5	100.0%
5.3	MCO's/PIHP's processes to consolidate diversified files, and to extract required information from the performance measure repository are appropriate.	2	2	2	2	2	5	0	0	5	100.0%
5.4	Actual results of file consolidations or extracts were consistent with those which should have resulted according to documented algorithms or specifications.	2	2	2	2	2	5	0	0	5	100.0%
5.5	Procedures for coordinating the activities of multiple subcontractors ensure the accurate, timely, and complete integration of data into the performance measure database.	2	2	2	2	2	5	0	0	5	100.0%
5.6	Computer program reports or documentation reflect vendor coordination activities, and no data necessary to performance measure reporting are lost or inappropriately modified during transfer.	2	2	2	2	2	5	0	0	5	100.0%
5.7	The repository's design, program flow charts, and source codes enable analyses and reports.	2	2	2	2	2	5	0	0	5	100.0%
5.8	Proper linkage mechanisms have been employed to join data from all necessary sources (e.g., identifying a member with a given disease/condition).	2	2	2	2	2	5	0	0	5	100.0%
5.9	Examine and assess the adequacy of the documentation governing the production process, including MCO/PIHP production activity logs, and MCO/PIHP staff review of report runs.	2	2	2	2	2	5	0	0	5	100.0%
5.10	Prescribed data cutoff dates were followed.	2	2	2	2	2	5	0	0	5	100.0%
5.11	The MCO/PIHP has retained copies of files or databases used for performance measure reporting, in the event that results need to be reproduced.	2	2	2	2	2	5	0	0	5	100.0%
5.12	Review documentation standards to determine the extent to which the reporting software program is properly documented with respect to every aspect of the performance measurement reporting repository, including building, maintaining, managing, testing, and report production.	2	2	2	2	2	5	0	0	5	100.0%
5.13	Review the MCO's/PIHP's processes and documentation to determine the extent to which they comply with the MCO/PIHP standards associated with reporting program specifications, code review, and testing.	2	2	2	2	2	5	0	0	5	100.0%
Number Met		13	13	13	13	13	65	0	0	65	100.0%
Number Partially Met		0	0	0	0	0					
Number Not Met		0	0	0	0	0					
Number Applicable		13	13	13	13	13					
Rate Met		100.0%	100.0%	100.0%	100.0%	100.0%					

Note: I = Partially Met; 0 = Not Met, validated through HEDIS software certification process, but no proper explanation of the process in documentation or no or insufficient explanation in documentation. Rate Met = Number Met / Number Applicable.

Source: BHC, Inc. 2006 External Quality Review Performance Measure Validation.



### Performance Management Solutions Group

A division of Behavioral Health Concepts, Inc.

## Documentation of Data and Processes

The objectives of this activity were to assess the documentation of data collection; the process of integrating data into a performance measure set; the procedures used to query the data set for sampling numerators and denominators; and the ability to apply proper algorithms. Table 14 summarizes the findings of [CMS Protocol Validating Performance Measures Attachment VI \(Data and Processes Used to Calculate and Report Performance Measures\)](#). Items 7.3 (statistical testing of results and corrections made after processing) and 7.4 (use of external data sources) did not apply to the measure. Item 7.2 did not apply to any of the MC+ MCOs for this measure. Items 7.5, 7.6, 7.7, and 7.10 were not applicable to Blue Advantage Plus of Kansas City and HealthCare USA, as these items only apply to the use of the Hybrid Method of calculation. MC+ MCOs Met 93.8% of the criteria for applying appropriate data and process for the calculation of the HEDIS 2006 Prenatal and Postpartum Care measure. All MC+ MCOs (100.0%) Met the criteria for following data file and field definitions. Two of the five MC+ MCOs used the Hybrid Method for calculation, and they all Met criteria for having detailed medical record review practices and reviewer training materials, use of detailed programming to identify the sample, and detailed sampling techniques. MC+ MCOs frequently graph the rates of performance over several years, and four of the five (80.0%) used the calculation of statistical significance in rates from year to year as a measure of the significance of fluctuation in the measure (see items 7.8 and 7.11); Mercy CarePlus did not complete these calculations. Each MC+ MCO calculating the measure Met 75.0% to 100% of the criteria for documentation of data and processes.



**Table 14 - Data and Processes Used to Calculate and Report Performance Measures, HEDIS 2006 Prenatal and Postpartum Care**

Item	Audit Elements	MC+ MCO					All MC+ MCOs				
		BA+	CMFHP	HCUSA	MCP	MOCare	Number Met	Number Partially Met	Number Not Met	Number Applicable	Rate Met
7.1	Data file and field definitions used for each measure.	2	2	2	2	2	5	0	0	5	100.0%
7.2	Maps to standard coding if not used in original data collection.	NA	NA	NA	NA	NA	0	0	0	0	NA
7.3	Statistical testing of results and any corrections or adjustments made after processing.	NA	NA	NA	NA	NA	0	0	0	0	NA
7.4	All data sources, including external data (whether from a vendor, public registry, or other outside source), and any prior years' data (if applicable).	NA	NA	NA	NA	NA	0	0	0	0	NA
7.5	Detailed medical record review methods and practices, including the qualifications of medical record review supervisor and staff; reviewer training materials; audit tools used, including completed copies of each record-level reviewer determination; all case-level critical performance measure data elements used to determine a positive or negative event or exclude a case from same; and inter-rater reliability testing procedures and results.	NA	2	NA	2	2	3	0	0	3	100.0%
7.6	Detailed computer queries, programming logic, or source code used to identify the population or sample for the denominator and/or numerator.	NA	2	NA	2	2	3	0	0	3	100.0%
7.7	If sampling used, description of sampling techniques, and documentation that assures the reviewer that samples used for baseline and repeat measurements of the performance measures were chosen using the same sampling frame and methodology.	NA	2	NA	2	2	3	0	0	3	100.0%
7.8	Documentation of calculation for changes in performance from previous periods (if applicable), including statistical tests of significance.	2	2	2	0	2	4	0	1	5	80.0%
7.9	Data that are related from measure to measure are consistent (e.g., membership counts, provider totals, number of pregnancies and births).	2	2	2	2	2	5	0	0	5	100.0%
7.10	Appropriate statistical functions are used to determine confidence intervals when sampling is used in the measure. When determining improvement in performance between measurement periods, appropriate statistical methodology is applied to determine levels of significance of changes.	NA	2	NA	2	2	3	0	0	3	100.0%
7.11		2	2	2	0	2	4	0	1	5	80.0%
	Number Met	4	8	4	6	8	30	0	2	32	93.8%
	Number Partially Met	0	0	0	0	0					
	Number Not Met	0	0	0	2	0					
	Number Applicable	4	8	4	8	8					
	Rate Met	100.0%	100.0%	100.0%	75.0%	100.0%					

Note: I = Partially Met; 0 = Not Met, validated through HEDIS software certification process, but no proper explanation of the process in documentation or no or insufficient explanation in documentation.

Source: BHC, Inc. 2006 External Quality Review Performance Measure Validation.



## Processes Used to Produce Denominators

The objective of this activity was to determine the extent to which all eligible members were included in the denominator, evaluate the programming and logic source codes, and evaluate the specifications for calculating each measure. Table 15 summarizes the findings of CMS Protocol Validating Performance Measures Attachment X (Denominator Validation Findings). Items 10.4 (Determination of patient age or range), 10.5 (Identification of gender of the member), 10.6 (Calculation of member months or years), and 10.10 (Systems for estimating populations when they are unable to accurately be counted) were not applicable to this measure. Of the five MC+ MCOs reviewed, 100% Met the criteria for producing denominators according to specifications.



**Table 15 - Denominator Validation Findings, HEDIS 2006 Prenatal and Postpartum Care**

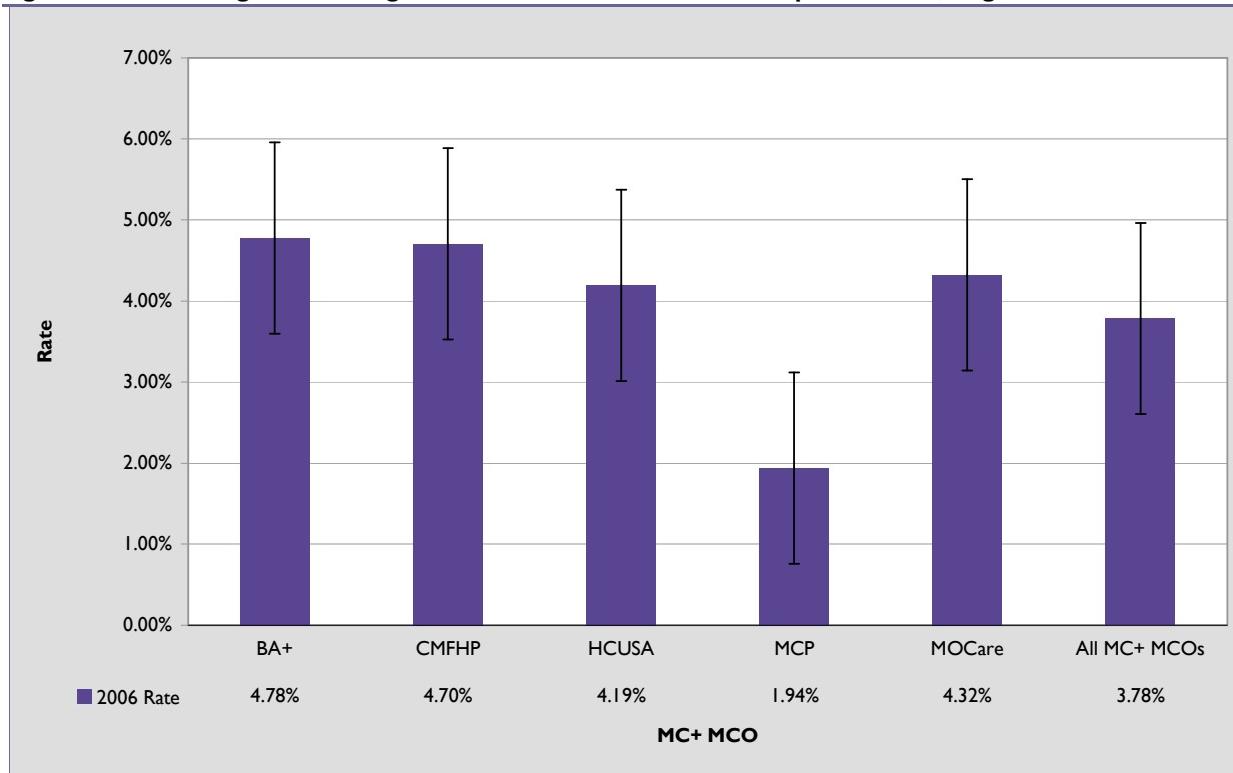
Item	Audit Elements	MC+ MCO					All MC+ MCOs				
		BA+	CMFHP	HCUSA	MCP	MOCare	Number Met	Number Partially Met	Number Not Met	Number Applicable	Rate Met
10.1	All members who were eligible to receive the specified services were included in the initial population from which the final denominator was produced. This "at risk" population included both members who received the services, as well as those who did not. This same standard applies to provider groups or other relevant populations identified in the specifications of each performance measure.	2	2	2	2	2	5	0	0	5	100.0%
10.2	For each measure, programming logic or source code which identifies, tracks, and links member enrollment within and across product lines (e.g., Medicare and Medicaid), by age and sex, as well as through possible periods of enrollment and disenrollment, has been appropriately applied according to the specifications of each performance measure.	2	2	2	2	2	5	0	0	5	100.0%
10.3	Calculations of continuous enrollment criteria were correctly carried out and applied to each measure (if applicable).	2	2	2	2	2	5	0	0	5	100.0%
10.4	Proper mathematical operations were used to determine patient age or range.	NA	NA	NA	NA	NA	0	0	0	0	NA
10.5	The MCO/PIHP can identify the variable(s) that define the member's sex in every file or algorithm needed to calculate the performance measure denominator, and the MCO/PIHP can explain what classification is carried out if neither of the required codes is present.	NA	NA	NA	NA	NA	0	0	0	0	NA
10.6	The MCO/PIHP has correctly calculated member months and member years, if applicable to the performance measure.	NA	NA	NA	NA	NA	0	0	0	0	NA
10.7	The MCO/PIHP has properly evaluated the completeness and accuracy of any codes used to identify medical events, such as diagnoses, procedures, or prescriptions, and these codes have been appropriately identified and applied as specified in each performance measure.	2	2	2	2	2	5	0	0	5	100.0%
10.8	Any time parameters required by the specifications of the performance measure are followed (e.g., cut off dates for data collection, counting 30 calendar days after discharge from a hospital, etc.).	2	2	2	2	2	5	0	0	5	100.0%
10.9	members from a denominator were followed. For example, if a measure relates to receipt of a specific service, the denominator may need to be adjusted to reflect instances in which the patient refuses the service or the service is contraindicated.	2	2	2	2	2	5	0	0	5	100.0%
10.10	Systems or methods used by the MCO/PIHP to estimate populations when they cannot be accurately or completely counted (e.g., newborns) are valid.	NA	NA	NA	NA	NA	0	0	0	0	NA
	Number Met	6	6	6	6	6	30	0	0	30	100.0%
	Number Partially Met	0	0	0	0	0					
	Number Not Met	0	0	0	0	0					
	Number Applicable	6	6	6	6	6					
	Rate Met	100.0%	100.0%	100.0%	100.0%	100.0%					

Note: I =Partially Met; 0 = Not Met, validated through HEDIS software certification process, but no proper explanation of the process in documentation or no or insufficient explanation in documentation. \* Item is not applicable to the measure being validated. Rate Met = Number Met / Number Applicable.

Source: BHC, Inc. 2006 External Quality Review Performance Measure Validation.

Figure 1 illustrates the rate of eligible members per MC+ MCO, based on the enrollment of all MC+ MCO Waiver Recipients as of December 31, 2005 (the end of the CY2005 measurement year). It was expected that MC+ MCOs would identify similar proportions of eligible members for the measure. The rate of eligible members (percent of eligible members divided by the total enrollment) was calculated for all MC+ MCOs. Two-tailed z-tests of each MC+ MCO comparing MC+ MCOs to the rate of eligible members for all MC+ MCOs were conducted at the 95% level of confidence. Although the rates of eligible members for Mercy CarePlus appear significantly lower than those of the other MC+ MCOs, there was not a statistical significance to the difference. Any difference in rates may be due to the demographic characteristics of the member population, the completeness of claims data, or the processes of identifying eligible members. The identification of eligible members for the HEDIS 2006 Prenatal and Postpartum Care measure is dependent on the quality of the enrollment and eligibility files.

**Figure 1 - MC+ Managed Care Program HEDIS 2006 Prenatal and Postpartum Care, Eligible Members**



**Note:** Error bars on the y-axis represent 95% confidence intervals; \* Indicates values are significant at the 95% level of significance, two-tailed z-test. Enrollment as of the last week in December 2005 (the measurement year) was used to calculate the rate.

Sources: MC+ MCO HEDIS 2006 Data Submission Tool (DST); Missouri Department of Social Services, Division of Medical Services, State MPRI Session Screens, enrollment figures for all Waivers, December 31, 2005.

## Processes Used to Produce Numerators

The objectives of this activity were to evaluate the MC+ MCOs' ability to accurately identify medical events, evaluate the ability to identify events from other sources, evaluate procedures for non-duplicate counting of multiple events, review time parameters and the use of non-standard code maps, and assess the processes and procedures for collecting and incorporating medical record review data. Tables 16 and 17 show the numerators, denominators, rates, and confidence intervals submitted by the MC+ MCOs to the SPHA on the DST for the HEDIS 2006 Prenatal and Postpartum Care measure for both Prenatal Rates (Table 16) and Postpartum Rates (Table 17). The rate for all MC+ MCOs was calculated by the EQRO, thus, there is no confidence interval reported for the statewide rate. HealthCare USA reported rates for each of the three regions (Eastern, Central, and Western) separately to the SPHA, as it is the task of the EQRO to compare MCO to MCO, these numbers have been combined to show an overall MCO rate. There is no confidence interval to report, however, because the MCO did not report one on the DST. The Prenatal Rate for all MC+ MCOs was 53.30%, with MC+ MCO rates ranging from 39.96% (Blue Advantage Plus) to 89.05% (Missouri Care). The Postpartum Rate for all MC+ MCOs was 44.54%, with MC+ MCO rates ranging from 39.46% (HealthCare USA) to 66.91% (Missouri Care).

**Table 16 - Data Submission for HEDIS 2006 Prenatal and Postpartum Care (Prenatal Rates)**

MC+ MCO	Final Data Collection Method Used	Denominator (DST)	Administrative Hits Reported by MCO (DST)	Medical Record Hits Reported by MCO (DST)	Total Hits Reported by MCO (DST)	Rate Reported by MCO (DST)	LCL - UCL (DST)
Blue Advantage Plus	Administrative	1404	561	NA	561	39.96%	37.37% - 42.55%
Childrens Mercy Family Health Partners	Hybrid	411	17	293	310	75.43%	71.14% - 79.71%
HealthCare USA	Administrative	6,589	3414	NA	3414	51.81%	
Mercy CarePlus	Hybrid	411	176	90	266	64.72%	59.98% - 69.46%
Missouri Care	Hybrid	411	195	171	366	89.05%	58.91% - 92.19%
All MC+ MCOs		9,226	4363	554	4,917	53.30%	

Note: DST = Data Submission Tool; NA = Not Applicable; EQRO = External Quality Review Organization (Behavioral Health Concepts, Inc.); LCL = 95% Lower Confidence Limit; UCL = 95% Upper Confidence Limit. The denominator is either the eligible population (for administrative method calculation) or the sample size (for hybrid method calculation). The statewide rate for all MC+ MCOs was calculated by the EQRO using the sum of numerators divided by the sum of denominators. There was no statewide rate or confidence limits reported to the SMA or SPHA.

Source: MC+ Managed Care Organization HEDIS 2006 Data Submission Tools (DST).

**Table 17 - Data Submission for HEDIS 2006 Prenatal and Postpartum Care (Postpartum Rates)**

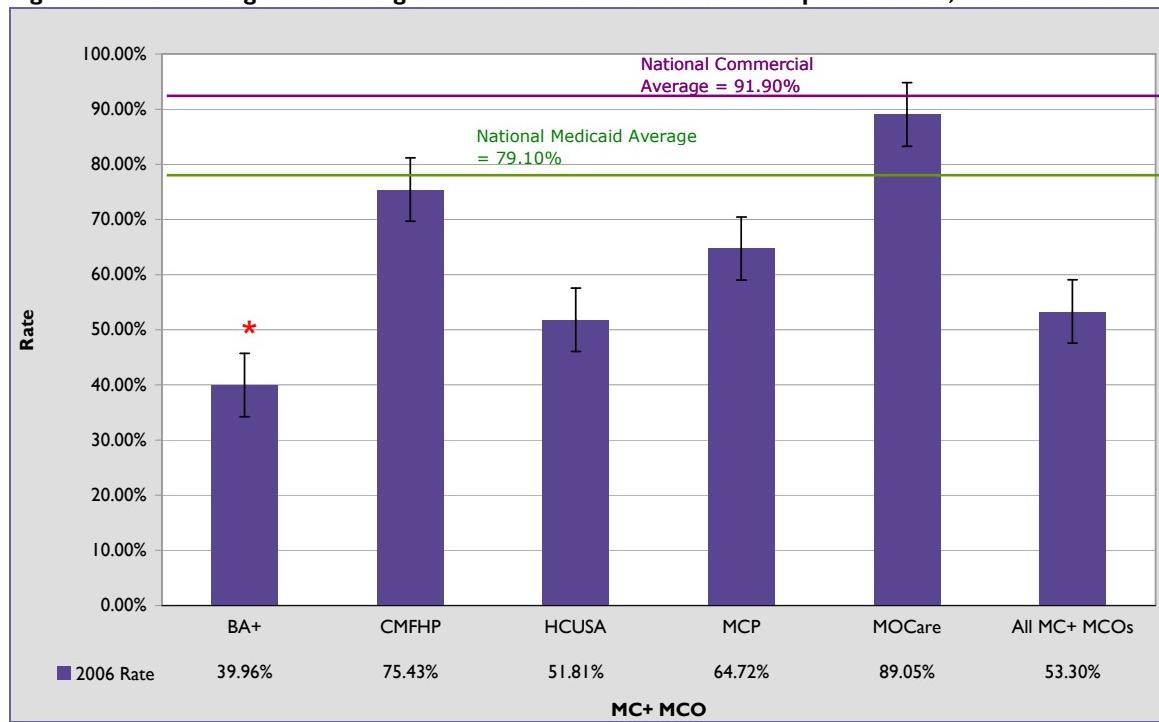
MC+ MCO	Final Data Collection Method Used	Denominator (DST)	Administrative Hits Reported by MCO (DST)	Medical Record Hits Reported by MCO (DST)	Total Hits Reported by MCO (DST)	Rate Reported by MCO (DST)	LCL - UCL (DST)
Blue Advantage Plus	Administrative	1404	787	NA	787	56.05%	53.43% - 58.68%
Childrens Mercy Family Health Partners	Hybrid	411	172	61	233	56.69%	51.78% - 61.60%
HealthCare USA	Administrative	6,589	2600	NA	2600	39.46%	
Mercy CarePlus	Hybrid	411	166	48	214	52.07%	47.12% - 57.02%
Missouri Care	Hybrid	411	201	74	275	66.91%	62.24% - 71.58%
All MC+ MCOs		9,226	3926	183	4,109	44.54%	

Note: DST = Data Submission Tool; NA = Not Applicable; EQRO = External Quality Review Organization (Behavioral Health Concepts, Inc.); LCL = 95% Lower Confidence Limit; UCL = 95% Upper Confidence Limit. The denominator is either the eligible population (for administrative method calculation) or the sample size (for hybrid method calculation). The statewide rate for all MC+ MCOs was calculated by the EQRO using the sum of numerators divided by the sum of denominators. There was no statewide rate or confidence limits reported to the SMA or SPHA.

Source: MC+ Managed Care Organization HEDIS 2006 Data Submission Tools (DST).

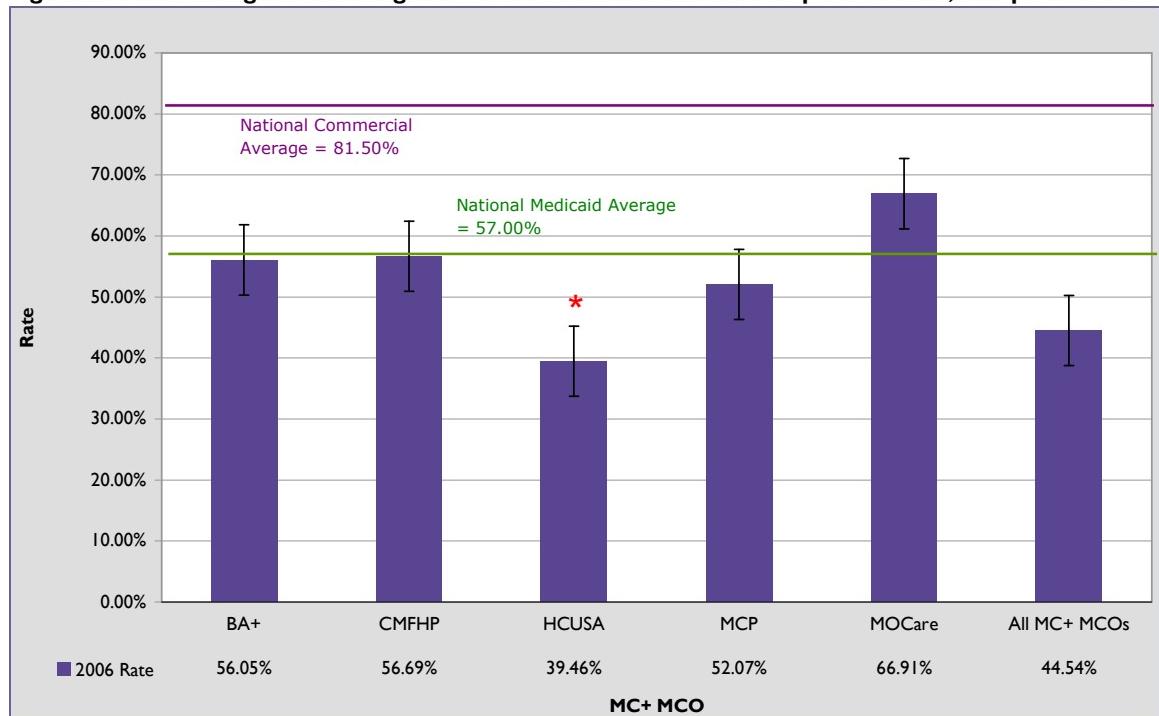
Figures 2 and 3 illustrate the rates reported by the MC+ MCOs and the rates of administrative and hybrid hits for each MC+ MCO on the HEDIS 2006 Prenatal and Postpartum Care measure. The rate reported by each MC+ MCO was compared with the rate for all MC+ MCOs, with two-tailed z-tests conducted at the 95% confidence interval. For Prenatal Visits (Figure 2), the rate for all MC+ MCOs was lower than the National Commercial Average (91.90%) and the National Medicaid rate (79.10%). Missouri Care reported a rate (89.05%) that was significantly above the rate for all MC+ MCOs and higher than the National Medicaid rate. Children's Mercy Family Health Partners also reported a rate higher than the National Medicaid rate, however it was not significantly higher than the rate for all MC+ MCOs. Blue Advantage Plus reported a rate (39.96%) that was significantly lower than the rate for all MC+ MCOs. When reviewing Postpartum Rates (Figure 3), the rate for all MC+ MCOs was lower than the National Commercial Average (81.50%) and the National Medicaid rate (57.00%). The combined rate (all 3 regions) for HealthCare USA (39.46%) was significantly lower than the rate for all MC+ MCOs. The rates of the remaining four MC+ MCOs were all higher than the rate for all MCOs combined. Again, Missouri Care reported a rate (66.91%) that was higher than the National Medicaid rate.



**Figure 2 - MC+ Managed Care Program HEDIS 2006 Prenatal and Postpartum Care, Prenatal Rates**

Note: Error bars on the y-axis represent 95% confidence intervals; \* Indicates values are significant at the 95% level of significance, two-tailed z-test.

Sources: MC+ MCO HEDIS 2006 Data Submission Tool (DST); National Committee for Quality Assurance (NCQA).

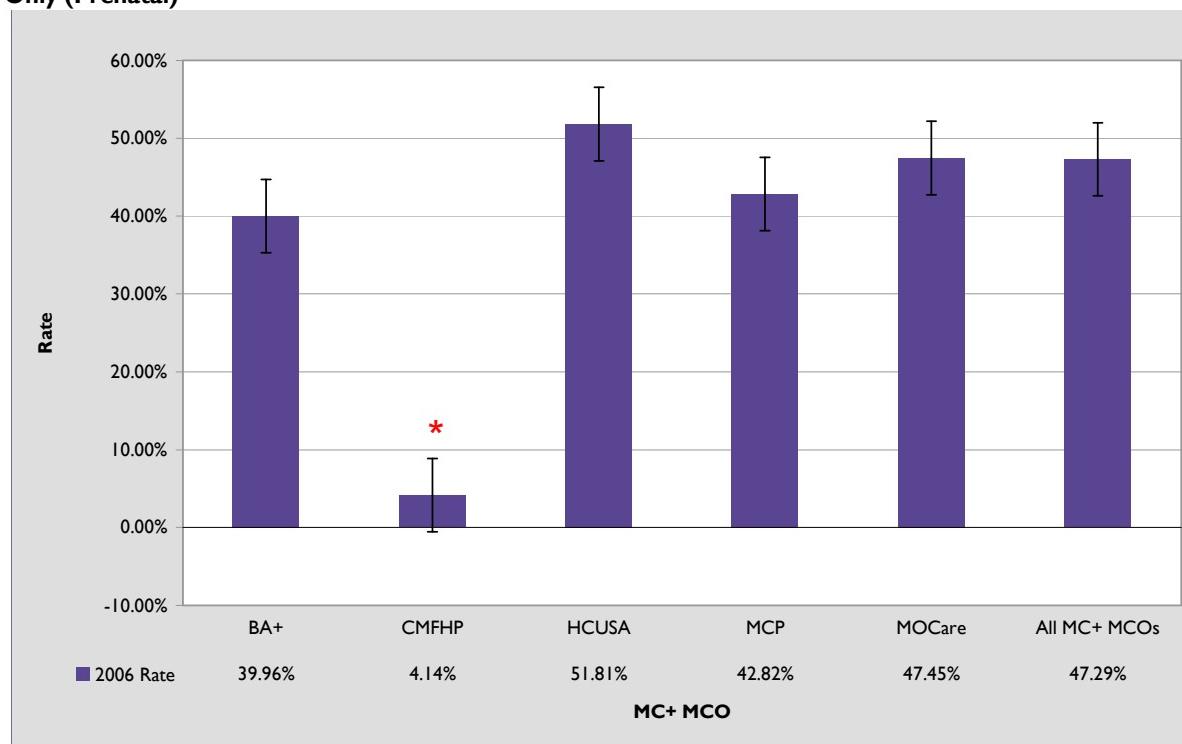
**Figure 3 - MC+ Managed Care Program HEDIS 2006 Prenatal and Postpartum Care, Postpartum Rates**

Note: Error bars on the y-axis represent 95% confidence intervals; \* Indicates values are significant at the 95% level of significance, two-tailed z-test.

Sources: MC+ MCO HEDIS 2006 Data Submission Tool (DST); National Committee for Quality Assurance (NCQA).

When the rates of administrative and hybrid hits were examined separately (see Figures 4-7), the Prenatal administrative rate for HealthCare USA (all three regions) was higher than the rate for all MC+ MCOs. Children's Mercy Family Health Partners reported a significantly lower rate of Prenatal administrative hits (4.14%) than the rate for all MC+ MCOs (47.29%). This may be a function of the completeness of the MC+ MCOs claim system or claims for recording prenatal visits, or may be due to differences in the population composition of the MCOs. The Postpartum administrative rate for all MC+ MCOs was 48.91%. Blue Advantage Plus of Kansas City reported a significantly higher rate of 56.05%. HealthCare USA reported a rate (39.46%) that was significantly lower than the statewide rate for all MC+ MCOs.

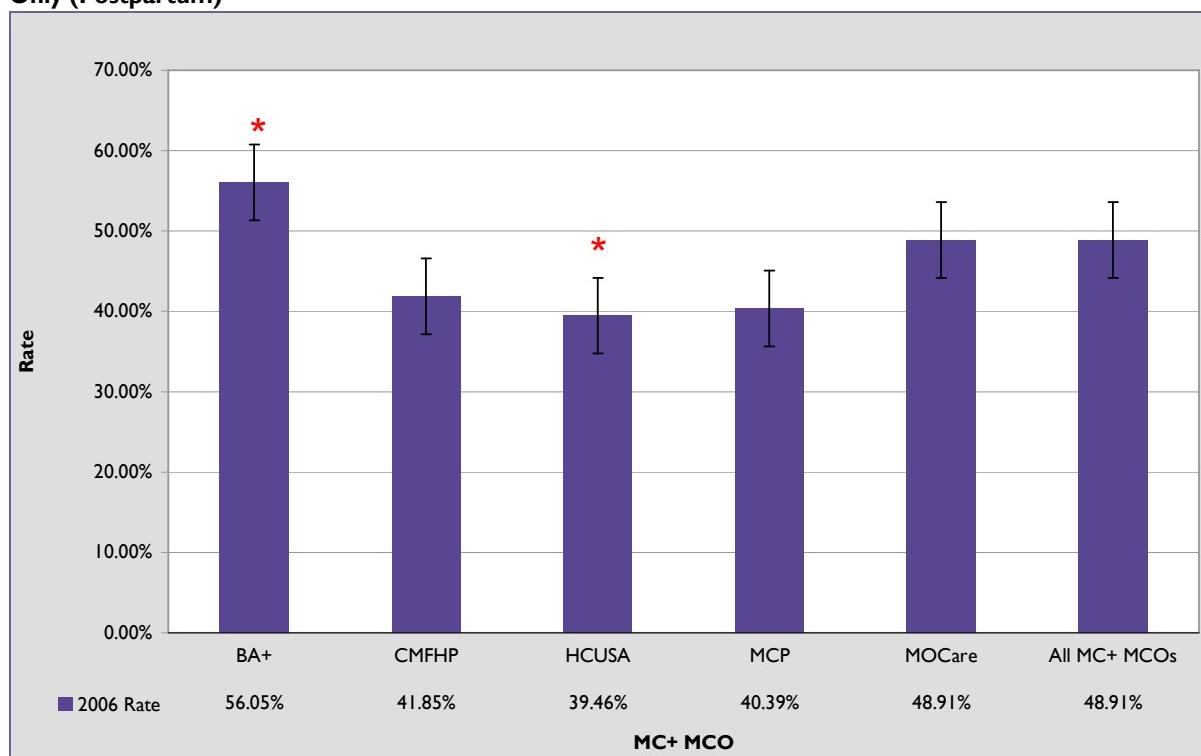
**Figure 4 - MC+ Managed Care Program HEDIS 2006 Prenatal and Postpartum Care, Administrative Rate Only (Prenatal)**



Note: Error bars on the y-axis represent 95% confidence intervals; \* Indicates values are significant at the 95% level of significance, two-tailed z-test.

Sources: MC+ MCO HEDIS 2006 Data Submission Tool (DST); National Committee for Quality Assurance (NCQA).

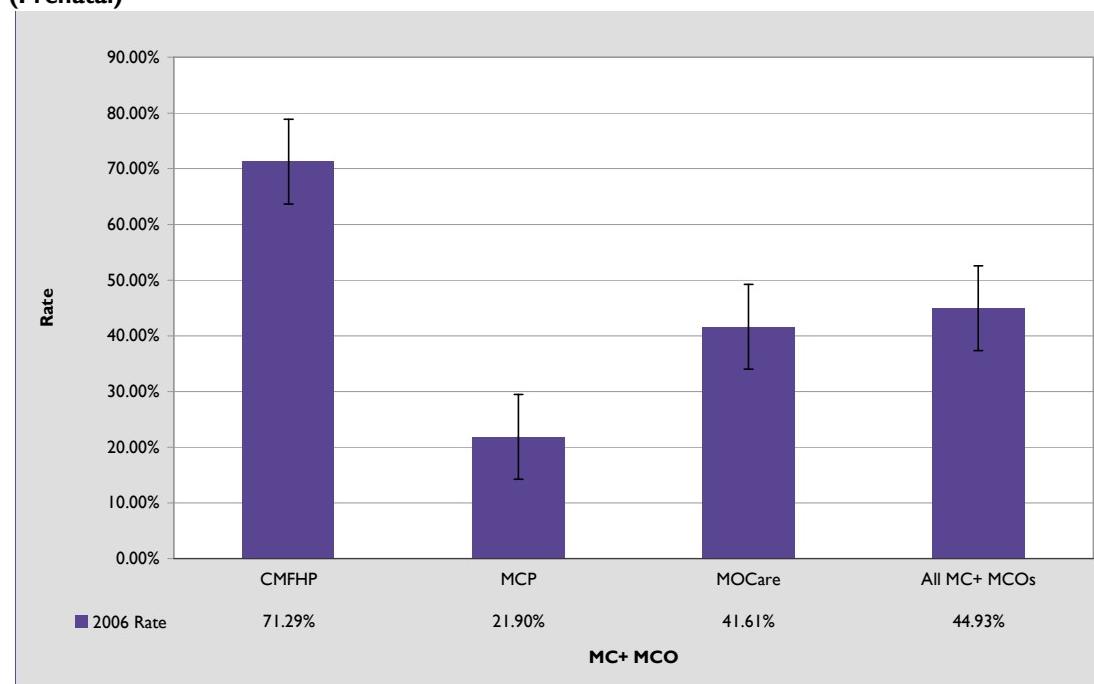
**Figure 5 - MC+ Managed Care Program HEDIS 2006 Prenatal and Postpartum Care, Administrative Rate Only (Postpartum)**



Note: Error bars on the y-axis represent 95% confidence intervals; \* Indicates values are significant at the 95% level of significance, two-tailed z-test.

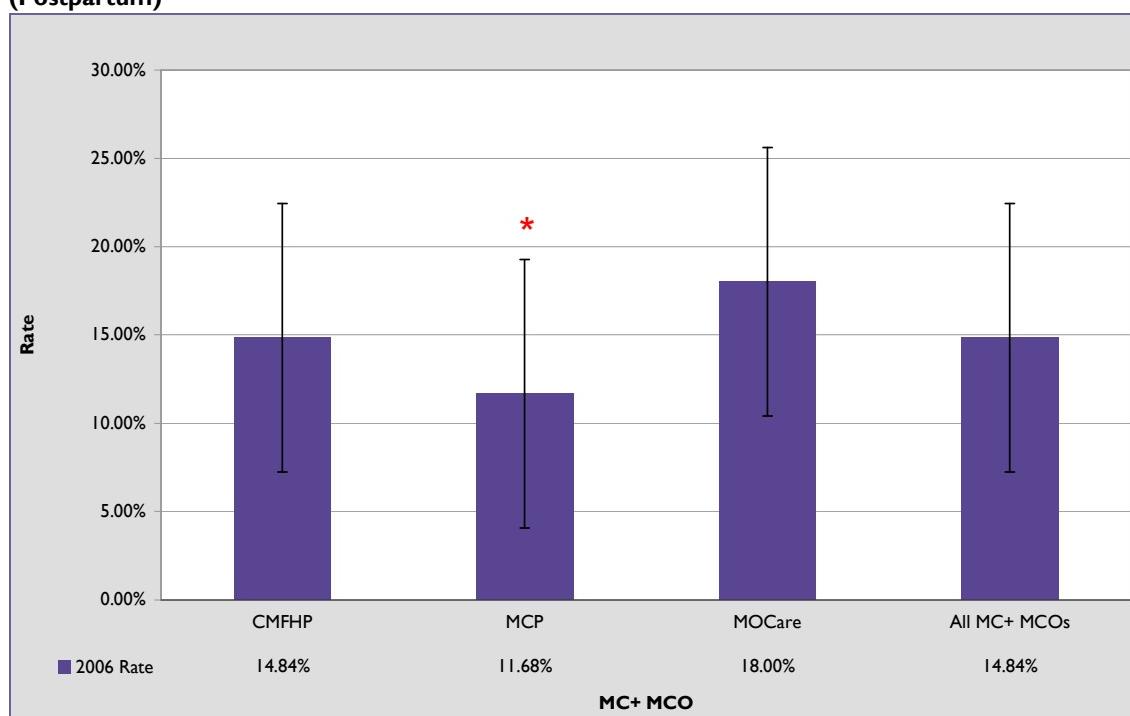
Sources: MC+ MCO HEDIS 2006 Data Submission Tool (DST); National Committee for Quality Assurance (NCQA).

For Prenatal hybrid hits, Children's Mercy Family Health Partners reported a higher rate of hybrid hits based on medical record review (71.29%) than the rate for all MC+ MCOs (44.93%) using the hybrid method. Mercy CarePlus reported a lower rate (21.90%). However, neither of these differences was of statistical significance. The Postpartum hybrid rates were relatively level across all MCOs. Mercy CarePlus reported a rate (11.68%) that was significantly lower than the statewide rate for all MC+ MCOs. Differences may be due to the differences in processes for carrying out medical record reviews and compiling hybrid data to calculate the rate using the Hybrid Method.

**Figure 6 - MC+ Managed Care Program HEDIS 2006 Prenatal and Postpartum Care, Hybrid Rate Only (Prenatal)**

**Note:** Error bars on the y-axis represent 95% confidence intervals; \* Indicates values are significant at the 95% level of significance, two-tailed z-test.

Sources: MC+ MCO HEDIS 2006 Data Submission Tool (DST); National Committee for Quality Assurance (NCQA).

**Figure 7 - MC+ Managed Care Program HEDIS 2006 Prenatal and Postpartum Care, Hybrid Rate Only (Postpartum)**

**Note:** Error bars on the y-axis represent 95% confidence intervals; \* Indicates values are significant at the 95% level of significance, two-tailed z-test.

Sources: MC+ MCO HEDIS 2006 Data Submission Tool (DST); National Committee for Quality Assurance (NCQA).

Tables 18 and 19 summarize the findings of the EQRO medical record review validation and [CMS Protocol Validating Performance Measures Attachment XII \(Impact of Medical Record Findings\)](#).

Three of the five MC+ MCOs used the Hybrid Method of calculation. The MC+ MCOs each selected a sample of 411 eligible members; these samples were consistent with HEDIS technical specifications. A total of 60 medical records reported as hybrid hits by MC+ MCOs were sampled for validation by the EQRO. The EQRO was unable to request a sample of records from Mercy CarePlus for this measure; further information about this issue can be found in the individual section of this report for Mercy CarePlus. Only those records received were included in the validation; however, the EQRO received all 60 (100%) of the records requested. Of the records received, 59 Prenatal hits were able to be validated (98.3%), resulting in an error rate of 1.7% across all MC+ MCOs using the Hybrid Method of calculation for Prenatal rates. The number of False Positive Records (the total amount that could not be validated) was 100 of the 554 reported hits. The estimated bias for individual MC+ MCOs based on the medical record validation ranged from a 0.0% to 21.9% overestimate in the rate, with an estimated bias of 0.7% for all MC+ MCOs using the Hybrid Method. Table 20 shows the impact of the medical record review findings for the Prenatal rates. For the Postpartum rates, 50 of the 60 Postpartum records were able to be validated (83.3%), resulting in an error rate of 16.7% across all MC+ MCOs using the Hybrid Method of calculation for Postpartum rates. Thirty-one of the 183 reported Postpartum hits were False Positive Records. The estimated bias for individual MC+ MCOs based on the medical record validation ranged from a 1.70% to 11.7% overestimate in the rate, with an estimated bias of 2.5% for all MC+ MCOs using the Hybrid Method. Table 21 shows the impact of the medical record review findings for the Postpartum rates.

**Table 18 - Medical Record Validation for HEDIS 2006 Prenatal and Postpartum Care, Prenatal Rates**

MC+ MCO	Denominator (Sample Size)	Numerator Hits by Medical Records (DST)	Number Medical Records Sampled for Audit by EQRO	Number Medical Records Received for Audit by EQRO	Number Medical Records Validated by EQRO	Rate Validated of Records Received	Accuracy Rate	Error Rate	Weight of Each Medical Record
Childrens Mercy Family Health Partners	411	293	30	30	29	96.7%	96.7%	3.3%	0.002
Mercy CarePlus	411	90	0	0	0	0.0%	0.0%	100.0%	0.002
Missouri Care	411	171	30	30	30	100.0%	100.0%	0.0%	0.002
All MC+ MCOs	1,233	554	60	60	59	98.3%	98.3%	1.7%	0.0008

Note: DST = Data Submission Tool; EQRO = External Quality Review Organization (Behavioral Health Concepts, Inc.); Accuracy Rate = Number of Medical Records Validated by the EQRO/Number of Records Selected for Audit by EQRO; Error Rate = 100% - Accuracy Rate; Weight of Each Medical Record = Error Rate \* Medical Record Hits Reported by MCO; Estimated Bias from Medical Records = Percent of bias due to the medical record review = False Positive Rate \* Weight of Each Medical Record.

Source: MC+ MCO Data Submission Tools (DST); BHC, Inc. 2006 External Quality Review Performance Measures Validation.

**Table 19 - Medical Record Validation for HEDIS 2006 Prenatal and Postpartum Care, Postpartum Rates**

MC+ MCO	Denominator (Sample Size)	Numerator Hits by Medical Records (DST)	Number Medical Records Sampled for Audit by EQRO	Number Medical Records Received for Audit by EQRO	Number Medical Records Validated by EQRO	Rate Validated of Records Received	Accuracy Rate	Error Rate	Weight of Each Medical Record
Childrens Mercy Family Health Partners	411	61	30	30	23	76.7%	76.7%	23.3%	0.002
Mercy CarePlus	411	48	0	0	0	0.0%	0.0%	100.0%	0.002
Missouri Care	411	74	30	30	27	90.0%	90.0%	10.0%	0.002
All MC+ MCOs	1,233	183	60	60	50	83.3%	83.3%	16.7%	0.0008

Note: DST = Data Submission Tool; EQRO = External Quality Review Organization (Behavioral Health Concepts, Inc.); Accuracy Rate = Number of Medical Records Validated by the EQRO/Number of Records Selected for Audit by EQRO; Error Rate = 100% - Accuracy Rate; Weight of Each Medical Record = Error Rate \* Medical Record Hits Reported by MCO; Estimated Bias from Medical Records = Percent of bias due to the medical record review = False Positive Rate \* Weight of Each Medical Record.

Source: MC+ MCO Data Submission Tools (DST); BHC, Inc. 2006 External Quality Review Performance Measures Validation.

**Table 20 - Impact of Medical Record Findings, HEDIS 2006 Prenatal and Postpartum Care (Prenatal Rates)**

Item	Audit Elements	MC+ MCO				
		BA+	CMFHP	HCUSA	MCP	MOCare
12.1	Final Data Collection Method Used (e.g., MRR, hybrid,)	Administrative	Hybrid	Administrative	Hybrid	Hybrid
12.2	Error Rate (Percentage of records selected for audit that were identified as not meeting numerator requirements)	NA	3.30%	NA	100.00%	0.00%
12.3	Is error rate < 10%? (Yes or No)	NA	Yes	NA	No	Yes
	If yes, MCO/PIHP passes MRR validation; no further MRR calculations are necessary.	NA	Passes	NA		Passes
	If no, the rest of the spreadsheet will be completed to determine the impact on the final rate.	NA		NA	See Below	
12.4	Denominator (The total number of members identified for the denominator of this measure, as identified by the MCO/PIHP)	1404	411	6589	411	411
12.5	Weight of Each Medical Record (Impact of each medical record on the final overall rate; determined by dividing 100% by the denominator)	NA	NA	NA	0.002	NA
12.6	Total Number of MRR Numerator Positives identified by the MCO/PIHP using MRR.	NA	NA	NA	90	NA
12.7	Expected Number of False Positives (Estimated number of medical records inappropriately counted as numerator positives)	NA	NA	NA	90	NA
12.8	Estimated Bias in Final Rate (The amount of bias caused by medical record review)	NA	NA	NA	21.90%	NA

Note: A = Administrative; H = Hybrid; NA = Not Applicable to the method employed by the MC+ MCO; Administrative Method was used by the MC+ MCO and the item relates to the Hybrid Method; 2 = Met and validated through HEDIS software certification process and proper explanation in documentation or proper explanation in documentation. I = Partially Met; 0 = Not Met, validated through HEDIS software certification process, but no proper explanation of the process in documentation or no or insufficient explanation in documentation.

Source: BHC, Inc. 2006 External Quality Review Performance Measure Validation.

**Table 21 - Impact of Medical Record Findings, HEDIS 2006 Prenatal and Postpartum Care (Postpartum Rates)**

Item	Audit Elements	MC+ MCO				
		BA+	CMFHP	HCUSA	MCP	MOCare
12.1	Final Data Collection Method Used (e.g., MRR, hybrid,)	Administrative	Hybrid	Administrative	Hybrid	Hybrid
12.2	Error Rate (Percentage of records selected for audit that were identified as not meeting numerator requirements)	NA	23.30%	NA	100.00%	10.00%
12.3	Is error rate < 10%? (Yes or No)	NA	No	NA	No	No
	If yes, MCO/PIHP passes MRR validation; no further MRR calculations are necessary.	NA		NA		
	If no, the rest of the spreadsheet will be completed to determine the impact on the final rate.	NA	See below	NA	See below	See below
12.4	Denominator (The total number of members identified for the denominator of this measure, as identified by the MCO/PIHP)	1404	411	6589	411	411
12.5	Weight of Each Medical Record (Impact of each medical record on the final overall rate; determined by dividing 100% by the denominator)	NA	0.002	NA	0.002	0.002
12.6	Total Number of MRR Numerator Positives identified by the MCO/PIHP using MRR.	NA	61	NA	48	74
12.7	Expected Number of False Positives (Estimated number of medical records inappropriately counted as numerator positives)	NA	14	NA	48	7
12.8	Estimated Bias in Final Rate (The amount of bias caused by medical record review)	NA	3.41%	NA	11.68%	1.70%

Note: A = Administrative; H = Hybrid; NA = Not Applicable to the method employed by the MC+ MCO; Administrative Method was used by the MC+ MCO and the item relates to the Hybrid Method; 2 = Met and validated through HEDIS software certification process and proper explanation in documentation or proper explanation in documentation. I = Partially Met; 0 = Not Met, validated through HEDIS software certification process, but no proper explanation of the process in documentation or no or insufficient explanation in documentation.

Source: BHC, Inc. 2006 External Quality Review Performance Measure Validation.

Table 22 shows the validation of numerators based on the review of numerator extract files and the medical record review. Item 13.2 was not applicable to this measure, as the services reported could not easily be obtained outside the MCO. Item 13.6 also did not apply, as none of the MC+ MCOs used non-standard codes to determine the numerators. Items 13.8 through 13.13 relate to the Hybrid Method and were not applicable to Blue Advantage Plus of Kansas City or HealthCare USA. Across all MC+ MCOs, 97.7% of the criteria for calculating the numerator were met. All of the MC+ MCOs calculating the measures Met criteria for using complete medical event codes, correctly classifying members for inclusion in the numerator, eliminating double-counting of members in numerator events, and following time parameters for the specification of the measure. Two (Children's Mercy Family Health Partners and Missouri Care) of the three MC+ MCOs using the Hybrid method of calculation met 100% of the requirements for conducting and integrating medical record review data. Mercy CarePlus Met 90.9% of the criteria for processes used to produce the numerators because they did not provide the EQRO with the correct medical record data file; therefore, the EQRO could not validate that item 13.12 was Met. Of the MC+ MCOs that calculated the measure, the rate for numerator findings ranged from 90.9% to 100.0%.

**Table 22 - Numerator Validation Findings, HEDIS 2006 Prenatal and Postpartum Care**

Item	Audit Elements	MC+ MCO				All MC+ MCOs				Number Applicable	Rate Met
		BA+	CMIHP	HCUSA	MCP	MOCare	Number Met	Number Partially Met	Number Not Met		
13.1	The MCO/PHP has used the appropriate data, including linked data from separate data sets, to identify the entire at-risk population.	2	2	2	2	2	2	5	0	5	100.0%
13.2	The MCO/PHP has, in place and utilizes procedures to capture data for those performance indicators that could be easily under-reported due to the availability of services outside the MCO/PHP.	NA	NA	NA	NA	NA	0	0	0	0	#DN/0!
13.3	The MCO/PHP's use of codes used to identify medical events are complete, accurate, and specific in correctly describing what has transpired and when.	2	2	2	2	2	5	0	0	5	100.0%
13.4	The MCO/PHP correctly evaluated medical event codes when classifying members for inclusion or exclusion in the numerator.	2	2	2	2	2	5	0	0	5	100.0%
13.5	The MCO/PHP has avoided or eliminated all double-counted members or numerator events.	2	2	2	2	2	5	0	0	5	100.0%
13.6	Any non-standard codes used in determining the numerator have been mapped to a standard coding scheme in a manner that is consistent, complete, and reproducible as evidenced by a review of the programming logic or a demonstration of the program.	NA	NA	NA	NA	NA	0	0	0	0	NA
13.7	Any time parameters required by the specifications of the performance measure are adhered to (i.e., that the measured event occurred during the time period specified on defined in the performance measure).	2	2	2	2	2	5	0	0	5	100.0%
13.8	Medical record reviews and abstractions have been carried out in a manner that facilitates the collection of complete, accurate, and valid data.	NA	2	NA	2	2	3	0	0	3	100.0%
13.9	Record review start have been properly trained and supervised for the task.	NA	2	NA	2	2	3	0	0	3	100.0%
13.10	Second abstraction tools require the appropriate notation that the measured event occurred.	NA	2	NA	2	2	3	0	0	3	100.0%
13.11	Record abstraction tools require notation of the results or findings of the measured event (if applicable).	NA	2	NA	2	2	3	0	0	3	100.0%
13.12	Data included in the record extract files are consistent with data found in the medical records as evidenced by a review of a sample of medical record for applicable performance measures. (From Medical Record Review Validation Tools)	NA	2	NA	0	2	2	0	1	3	66.7%
13.13	The process of integrating administrative data and medical record data for the purpose of determining the numerator is consistent and valid.	NA	2	NA	2	2	3	0	0	3	100.0%
Number Met		5	11	5	10	11	42	0	1	43	97.7%
Number Partially Met		0	0	0	0	0					
Number Not Met		0	0	0	1	0					
Number Applicable		5	11	5	11	11					
Rate Met		100.0%	100.0%	100.0%	100.0%	90.9%					

Note: A = Administrative; H = Hybrid; NA = Not Applicable to the method employed by the MC+ MCO; Administrative Method was used by the MC+ MCO and the item relates to the Hybrid Method; 2 = Met and validated through HEDIS software certification process and proper explanation in documentation or proper explanation in documentation. I = Partially Met; 0 = Not Met, validated through HEDIS software certification process, but no proper explanation of the process in documentation or no or insufficient explanation in documentation.

Source: BHC, Inc. 2006 External Quality Review Performance Measure Validation.

### **Sampling Procedures for Hybrid Method**

The objectives of this activity were to evaluate the MC+ MCOs' ability to randomly sample from the eligible members for the measure when using the Hybrid Method of calculation. Table 23 summarizes the findings of CMS Protocol Validating Performance Measures Attachment XV (Sampling Validation Findings). Item 15.9 (documenting if the requested sample size exceeded the eligible population size) did not apply to any of the MC+ MCOs for this measure. None of the items were applicable to Blue Advantage Plus of Kansas City or HealthCare USA, as they did not utilize the Hybrid method of calculation. Two of the remaining three MC+ MCOs Met 100% of the criteria for Hybrid Method sampling procedures. Mercy CarePlus did not provide the correct hybrid data file to the EQRO for this measure; therefore, all items regarding sampling procedures for the Hybrid Method were Not Met. Of the MC+ MCOs that calculated the measure, the rate for proper sampling ranged from 0.0% to 100.0%.



**Table 23 - Sampling Validation Findings, HEDIS 2006 Prenatal and Postpartum Care**

Item	Audit Elements	MC+ MCO					All MC+ MCOs				
		BA+	CMFHP	HCUSA	MCP	MOCare	Number Met	Number Partially Met	Number Not Met	Number Applicable	Rate Met
15.1	Each relevant member or provider had an equal chance of being selected; no one was systematically excluded from the sampling.	NA	2	NA	0	2	2	0	1	3	66.7%
15.2	The MCO / PIHP followed the specifications set forth in the performance measure regarding the treatment of sample exclusions and replacements, and if any activity took place involving replacements of or exclusions from the sample, the MCO/PIHP kept adequate documentation of that activity.	NA	2	NA	0	2	2	0	1	3	66.7%
15.3	Each provider serving a given number of enrollees had the same probability of being selected as any other provider serving the same number of enrollees.*	NA	2	NA	0	2	2	0	1	3	66.7%
15.4	The MCO/PIHP examined its sampled files for bias, and if any bias was detected, the MCO/PIHP is able to provide documentation that describes any efforts taken to correct it.	NA	2	NA	0	2	2	0	1	3	66.7%
15.5	independently, and there is no correlation between drawn samples.	NA	2	NA	0	2	2	0	1	3	66.7%
15.6	Relevant members or providers who were not included in the sample for the baseline measurement had the same chance of being selected for the follow-up measurement as providers who were included in the baseline.	NA	2	NA	0	2	2	0	1	3	66.7%
15.7	The MCO/PIHP has policies and procedures to maintain files from which the samples are drawn in order to keep the population intact in the event that a sample must be re-drawn, or replacements made, and documentation that the original population is intact.	NA	2	NA	0	2	2	0	1	3	66.7%
15.8	Sample sizes meet the requirements of the performance measure specifications.	NA	2	NA	0	2	2	0	1	3	66.7%
15.9	The MCO/PIHP has appropriately handled the documentation and reporting of the measure if the requested sample size exceeds the population size.	NA	NA	NA	NA	NA	0	0	0	0	NA
15.10	The MCO/PIHP properly oversampled in order to accommodate potential exclusions	NA	2	NA	0	2	2	0	1	3	66.7%
15.11	Substitution applied only to those members who met the exclusion criteria specified in the performance measure definitions or requirements.	NA	2	NA	0	2	2	0	1	3	66.7%
15.12	Substitutions were made for properly excluded records and the percentage of substituted records was documented.	NA	2	NA	0	2	2	0	1	3	66.7%
	Number Met	0	11	0	0	11	22	0	11	33	66.7%
	Number Partially Met	0	0	0	0	0					
	Number Not Met	0	0	0	11	0					
	Number Applicable	0	11	0	11	11					
	Rate Met	NA	100.0%	NA	0.0%	100.0%					

Note: A = Administrative; H = Hybrid; NA = Not Applicable to the method employed by the MC+ MCO; Administrative Method was used by the MC+ MCO and the item relates to the Hybrid Method; 2 = Met and validated through HEDIS software certification process and proper explanation in documentation or proper explanation in documentation. I = Partially Met; 0 = Not Met, validated through HEDIS software certification process, but no proper explanation of the process in documentation or no or insufficient explanation in documentation.

Source: BHC, Inc. 2006 External Quality Review Performance Measure Validation.



## Submission of Measures to the State

Reports from the SPHA were obtained regarding the submission of the HEDIS 2006 Prenatal and Postpartum Care measure. All five MC+ MCOs calculated and submitted the measure to the SPHA and SMA. All HMOs in the State of Missouri are required to calculate and report the measure to the SPHA, and MC+ MCOs are required to report the measure to the SMA.

## Final Validation Findings

Tables 24 and 25 show the final data validation findings and the total estimated bias calculation based on the validation of medical record data and review of the MC+ MCO extract files for calculating the HEDIS 2006 Prenatal and Postpartum Care measure for both Prenatal and Postpartum Rates. Figures 8 and 9 illustrate the differences between the rates reported to the SPHA and those calculated by the EQRO for both Prenatal and Postpartum calculations. The Prenatal rate for all MC+ MCOs calculated based on data validated by the EQRO was 52.51%, while the rate reported by MC+ MCOs was 53.30% (see Table 24 and Figure 8), a 1.08% overestimate. The overall Postpartum rate validated by the EQRO was 43.78%, while the rate reported by the MC+ MCOs was 44.54% (see Table 25 and Figure 9, an overestimate of 0.75% overestimate).

**Table 24 - Final Data Validation for HEDIS 2006 Prenatal and Postpartum Care, Prenatal Rates**

MC+ MCO	Administrative Hits Validated by EQRO	Percentage of Medical Record Hits Validated by EQRO*	Total Hits Validated by EQRO	Rate Reported by MCO (DST)	Rate Validated by EQRO	Total Estimated Bias
Blue Advantage Plus	561	NA	561	39.96%	39.96%	0.00%
Childrens Mercy Family Health Partners	17	96.70%	300	75.43%	73.07%	2.35%
HealthCare USA (all 3 regions)	3414	NA	3414	51.81%	51.81%	0.00%
Mercy CarePlus	176	0.00%	176	64.72%	42.82%	21.90%
Missouri Care	195	100.00%	366	89.05%	89.05%	0.00%
All MC+ MCOs	4363		4817	53.30%	52.21%	1.08%

Note: DST = Data Submission Tool; NA = Not Applicable; EQRO = External Quality Review Organization (Behavioral Health Concepts, Inc.); LCL = 95% Lower Confidence Limit; UCL = 95% Upper Confidence Limit; False Positive Records = Error Rate \* Medical Record Hits Reported by MC+ MCO; Medical Record Hits Validated by the EQRO = Medical Record Hits Reported by MC+ MCO (DST) - False Positive Records; Total Estimated Bias = Rate Validated by EQRO using medical record review and data extract file review - Rate Reported by MC+ MCO (DST). Positive numbers represent an overestimate. The EQRO is charged with providing MCO to MCO comparisons. Therefore, the numerators and denominators for HealthCare USA were aggregated across all three regions, which were each 100% validated.

Source: BHC, Inc. 2006 External Quality Review Performance Measure Validation.



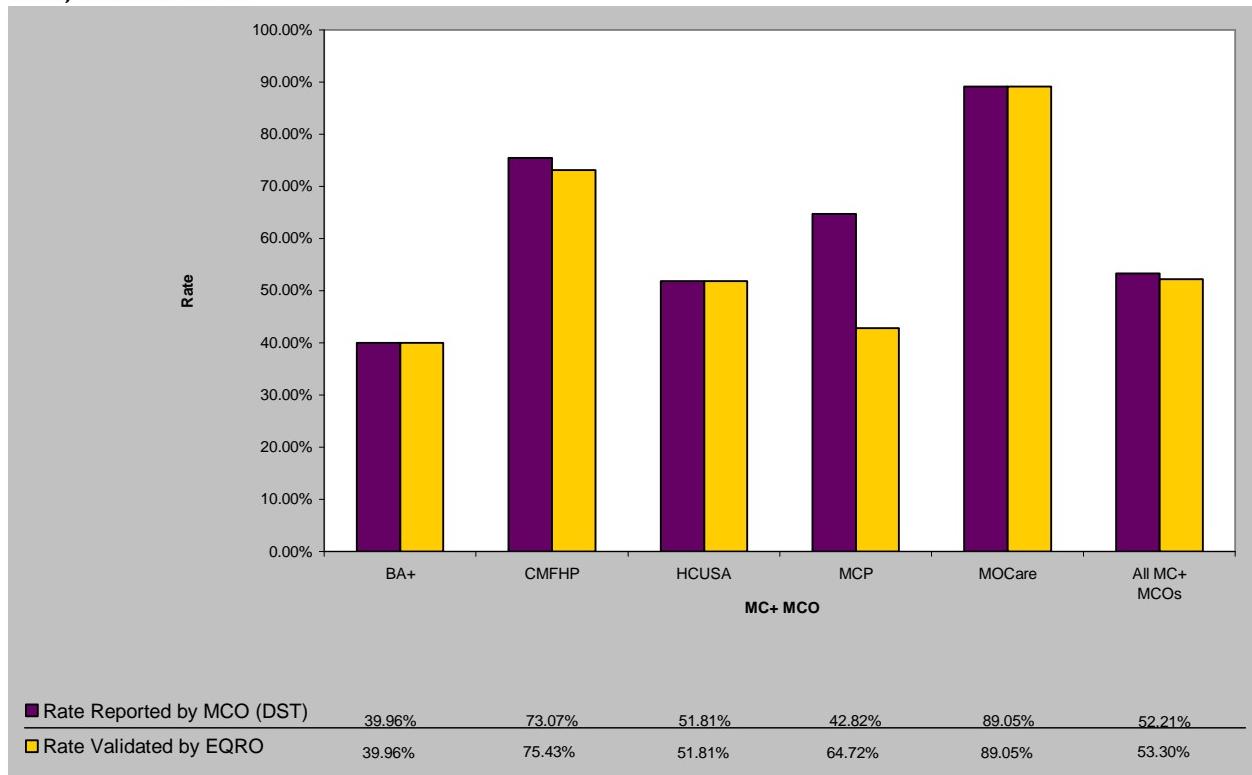
**Table 25 - Final Data Validation for HEDIS 2006 Prenatal and Postpartum Care, Postpartum Rates**

MC+ MCO	Administrative Hits Validated by EQRO	Percentage of Medical Record Hits Validated by EQRO*	Total Hits Validated by EQRO	Rate Reported by MCO (DST)	Rate Validated by EQRO	Total Estimated Bias
Blue Advantage Plus	787	NA	787	56.05%	56.05%	0.00%
Childrens Mercy Family Health Partners	172	76.70%	219	56.69%	53.23%	3.46%
HealthCare USA (all 3 regions)	2600	NA	2600	39.46%	39.46%	0.00%
Mercy CarePlus	166	0.00%	166	52.07%	40.39%	11.68%
Missouri Care	201	90.00%	268	66.91%	65.11%	1.80%
<b>All MC+ MCOs</b>	<b>3926</b>		<b>4039</b>	<b>44.54%</b>	<b>43.78%</b>	<b>0.75%</b>

Note: DST = Data Submission Tool; NA = Not Applicable; EQRO = External Quality Review Organization (Behavioral Health Concepts, Inc.); LCL = 95% Lower Confidence Limit; UCL = 95% Upper Confidence Limit; False Positive Records = Error Rate \* Medical Record Hits Reported by MC+ MCO; Medical Record Hits Validated by the EQRO = Medical Record Hits Reported by MC+ MCO (DST) - False Positive Records; Total Estimated Bias = Rate Validated by EQRO using medical record review and data extract file review - Rate Reported by MC+ MCO (DST). Positive numbers represent an overestimate. The EQRO is charged with providing MCO to MCO comparisons. Therefore, the numerators and denominators for HealthCare USA were aggregated across all three regions, which were each 100% validated.

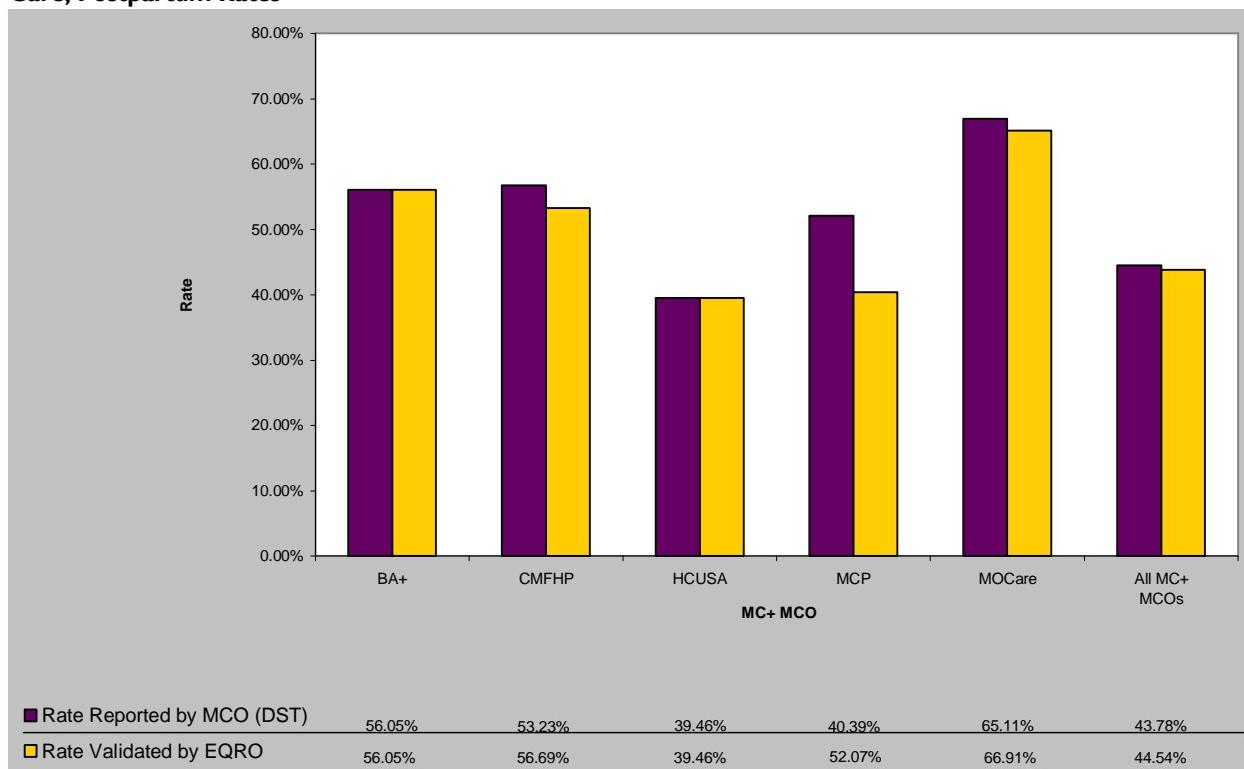
Source: BHC, Inc. 2006 External Quality Review Performance Measure Validation.

**Figure 8 - Rates Reported by MC+ MCOs and Validated by EQRO, HEDIS 2006 Prenatal and Postpartum Care, Prenatal Rates**



Sources: MC+ MCO HEDIS 2006 Data Submission Tool (DST); BHC, Inc., 2006 External Quality Review Performance Measure Validation.

**Figure 9 - Rates Reported by MC+ MCOs and Validated by EQRO, HEDIS 2006 Prenatal and Postpartum Care, Postpartum Rates**



Sources: MC+ MCO HEDIS 2006 Data Submission Tool (DST); BHC, Inc., 2006 External Quality Review Performance Measure Validation.

## HEDIS 2006 WELL-CHILD VISITS IN THE THIRD, FOURTH, FIFTH AND SIXTH YEARS OF LIFE

### Data Integration and Control

The objective of this activity was to assess the MC+ MCOs' ability to link data from multiple sources for the calculation of the HEDIS 2006 Well-Child Visits measure. It is related to the integrity of the management information systems and the ability to ensure accuracy of the measures. For the HEDIS 2006 Well-Child Visits measure, the sources of data included enrollment, eligibility, and claim files. Table 26 summarizes the findings of CMS Protocol Validating Performance Measures Attachment V (Data Integration and Control Findings). The rate of items that were Met was calculated across MC+ MCOs and from the number of applicable items for each MC+ MCO.

No data integration and control issues were discovered by the EQRO. All MC+ MCOs (100.0%) Met the criteria for all areas of data integration and control.



**Table 26 - Data Integration and Control Findings, HEDIS 2006 Well-Child Visits in the 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> Years of Life**

Item	Audit Elements	MC+ MCO							All MC+ MCOs		
		BA+	CMFHP	HCUSA	MCP	MOCare	Number Met	Number Partially Met	Number Not Met	Number Applicable	Rate Met
5.1	MCO/PIHP processes accurately and completely transfer data from the transaction files (e.g., membership, provider, encounter/claims) into the repository used to keep the data until the calculations of the performance measures have been completed and validated.	2	2	2	2	2	5	0	0	5	100.0%
5.2	Samples of data from repository are complete and accurate.	2	2	2	2	2	5	0	0	5	100.0%
5.3	MCO's/PIHP's processes to consolidate diversified files, and to extract required information from the performance measure repository are appropriate.	2	2	2	2	2	5	0	0	5	100.0%
5.4	Actual results of file consolidations or extracts were consistent with those which should have resulted according to documented algorithms or specifications.	2	2	2	2	2	5	0	0	5	100.0%
5.5	Procedures for coordinating the activities of multiple subcontractors ensure the accurate, timely, and complete integration of data into the performance measure database.	2	2	2	2	2	5	0	0	5	100.0%
5.6	Computer program reports or documentation reflect vendor coordination activities, and no data necessary to performance measure reporting are lost or inappropriately modified during transfer.	2	2	2	2	2	5	0	0	5	100.0%
5.7	The repository's design, program flow charts, and source codes enable analyses and reports.	2	2	2	2	2	5	0	0	5	100.0%
5.8	Proper linkage mechanisms have been employed to join data from all necessary sources (e.g., identifying a member with a given disease/condition).	2	2	2	2	2	5	0	0	5	100.0%
5.9	Examine and assess the adequacy of the documentation governing the production process, including MCO/PIHP production activity logs, and MCO/PIHP staff review of report runs.	2	2	2	2	2	5	0	0	5	100.0%
5.10	Prescribed data cutoff dates were followed.	2	2	2	2	2	5	0	0	5	100.0%
5.11	The MCO/PIHP has retained copies of files or databases used for performance measure reporting, in the event that results need to be reproduced.	2	2	2	2	2	5	0	0	5	100.0%
5.12	Review documentation standards to determine the extent to which the reporting software program is properly documented with respect to every aspect of the performance measurement reporting repository, including building, maintaining, managing, testing, and report production.	2	2	2	2	2	5	0	0	5	100.0%
5.13	Review the MCO's/PIHP's processes and documentation to determine the extent to which they comply with the MCO/PIHP standards associated with reporting program specifications, code review, and testing.	2	2	2	2	2	5	0	0	5	100.0%
	Number Met	13	13	13	13	13	65	0	0	65	100.0%
	Number Partially Met	0	0	0	0	0					
	Number Not Met	0	0	0	0	0					
	Number Applicable	13	13	13	13	13					
	Rate Met	100.0%	100.0%	100.0%	100.0%	100.0%					

Note: A = Administrative; H = Hybrid; NA = Not Applicable to the method employed by the MC+ MCO; Administrative Method was used by the MC+ MCO and the item relates to the Hybrid Method; 2 = Met and validated through HEDIS software certification process and proper explanation in documentation or proper explanation in documentation. I = Partially Met; 0 = Not Met, validated through HEDIS software certification process, but no proper explanation of the process in documentation or no or insufficient explanation in documentation.

Source: BHC, Inc. 2006 External Quality Review Performance Measure Validation.

## Documentation of Data and Processes

The objectives of this activity were to assess the documentation of data collection; the process of integrating data into a performance measure set; the procedures used to query the data set for sampling, numerators and denominators; and the ability to apply proper algorithms for the calculation of HEDIS 2006 Well-Care Visits measure. Table 27 summarizes the findings of CMS Protocol Validating Performance Measures Attachment VI (Data and Processes Used to Calculate and Report Performance Measures). Items 7.3 (statistical testing of results and corrections made after processing), 7.4 (inclusion of external data sources), and 7.9 (consistent data from measure to measure) did not apply to this measure. Item 7.2 did not apply to any MC+ MCOs for this measure, as none of the MCOs used non-standard codes. Items 7.5, 7.7, and 7.10 are only applicable for the Hybrid method of calculation, and therefore did not apply to Blue Advantage Plus of Kansas City, HealthCare USA, or Mercy CarePlus. Across all MC+ MCOs, 92.3% of the criteria were met. All MC+ MCOs (100.0%) Met the criteria for following data file and field definitions and using appropriate computer logic and source code. Four of the five MC+ MCOs (80.0%) used calculations of statistical significance in rates from year to year as a measure of the significance of fluctuation in the measure; Mercy CarePlus did not (see items 7.8 and 7.11). When sampling, both (100.0%) of the MC+ MCOs using the Hybrid Method Met the criteria for using appropriate statistical functions for determining confidence intervals for sampling. Each MC+ MCO calculating the measure Met 50.0% to 100.0% of the criteria for processes used to calculate and report the HEDIS 2006 Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life measure.

**Table 27 - Data and Processes Used to Calculate and Report Performance Measures, HEDIS 2006 Well-Child Visits in the 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> Years of Life Measure**

Item	Audit Elements	MC+ MCO					All MC+ MCOs				
		BA+	CMFHP	HCUSA	MCP	MOCare	Number Met	Number Partially Met	Number Not Met	Number Applicable	Rate Met
7.1	Data file and field definitions used for each measure.	2	2	2	2	2	5	0	0	5	100.0%
7.2	Maps to standard coding if not used in original data collection.	NA	NA	NA	NA	NA	0	0	0	0	NA
7.3	Statistical testing of results and any corrections or adjustments made after processing.	NA	NA	NA	NA	NA	0	0	0	0	NA
7.4	All data sources, including external data (whether from a vendor, public registry, or other outside source), and any prior years' data (if applicable).	NA	NA	NA	NA	NA	0	0	0	0	NA
7.5	Detailed medical record review methods and practices, including the qualifications of medical record review supervisor and staff; reviewer training materials; audit tools used, including completed copies of each record-level reviewer determination; all case-level critical performance measure data elements used to determine a positive or negative event or exclude a case from same; and inter-rater reliability testing procedures and results.	NA	2	NA	NA	2	2	0	0	2	100.0%
7.6	Detailed computer queries, programming logic, or source code used to identify the population or sample for the denominator and/or numerator.	2	2	2	2	2	5	0	0	5	100.0%
7.7	If sampling used, description of sampling techniques, and documentation that assures the reviewer that samples used for baseline and repeat measurements of the performance measures were chosen using the same sampling frame and methodology.	NA	2	NA	NA	2	2	0	0	2	100.0%
7.8	Documentation of calculation for changes in performance from previous periods (if applicable), including statistical tests of significance.	2	2	2	0	2	4	0	1	5	80.0%
7.9	Data that are related from measure to measure are consistent (e.g., membership counts, provider totals, number of pregnancies and births).	NA	NA	NA	NA	NA	0	0	0	0	NA
7.10	Appropriate statistical functions are used to determine confidence intervals when sampling is used in the measure.	NA	2	NA	NA	2	2	0	0	2	100.0%
7.11	When determining improvement in performance between measurement periods, appropriate statistical methodology is applied to determine levels of significance of changes.	2	2	2	0	2	4	0	1	5	80.0%
	Number Met	4	7	4	2	7	24	0	2	26	92.3%
	Number Partially Met	0	0	0	0	0					
	Number Not Met	0	0	0	2	0					
	Number Applicable	4	7	4	4	7					
	Rate Met	100.0%	100.0%	100.0%	50.0%	100.0%					

Note: A = Administrative; H = Hybrid; NA = Not Applicable to the method employed by the MC+ MCO; Administrative Method was used by the MC+ MCO and the item relates to the Hybrid Method; 2 = Met and validated through HEDIS software certification process and proper explanation in documentation or proper explanation in documentation. I = Partially Met; 0 = Not Met, validated through HEDIS software certification process, but no proper explanation of the process in documentation or no or insufficient explanation in documentation. Rate Met = Number Met / Number Applicable.

Source: BHC, Inc. 2006 External Quality Review Performance Measure Validation.

### Processes Used to Produce Denominators

The objective of this activity was to determine the extent to which all eligible members were included in the denominator, evaluate the programming and logic source codes, and evaluate the specifications for each measure. For the HEDIS 2006 Well-Child Visits measure, the sources of data include enrollment, eligibility, and claim files. Table 28 summarizes the findings of CMS Protocol Validating Performance Measures Attachment X (Denominator Validation Findings). Items 10.5 (identification of gender of the member), 10.6 (calculation of member months or years), and 10.10 (Systems for estimating populations when they are unable to accurately be counted) were not applicable to the HEDIS 2006 Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life measure. All of the remaining criteria were Met by all of the MC+ MCOs. 100.0% of the criteria were Met for the processes used to produce denominators.



**Table 28 - Denominator Validation Findings, HEDIS 2006 Well-Child Visits in the 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> Years of Life Measure**

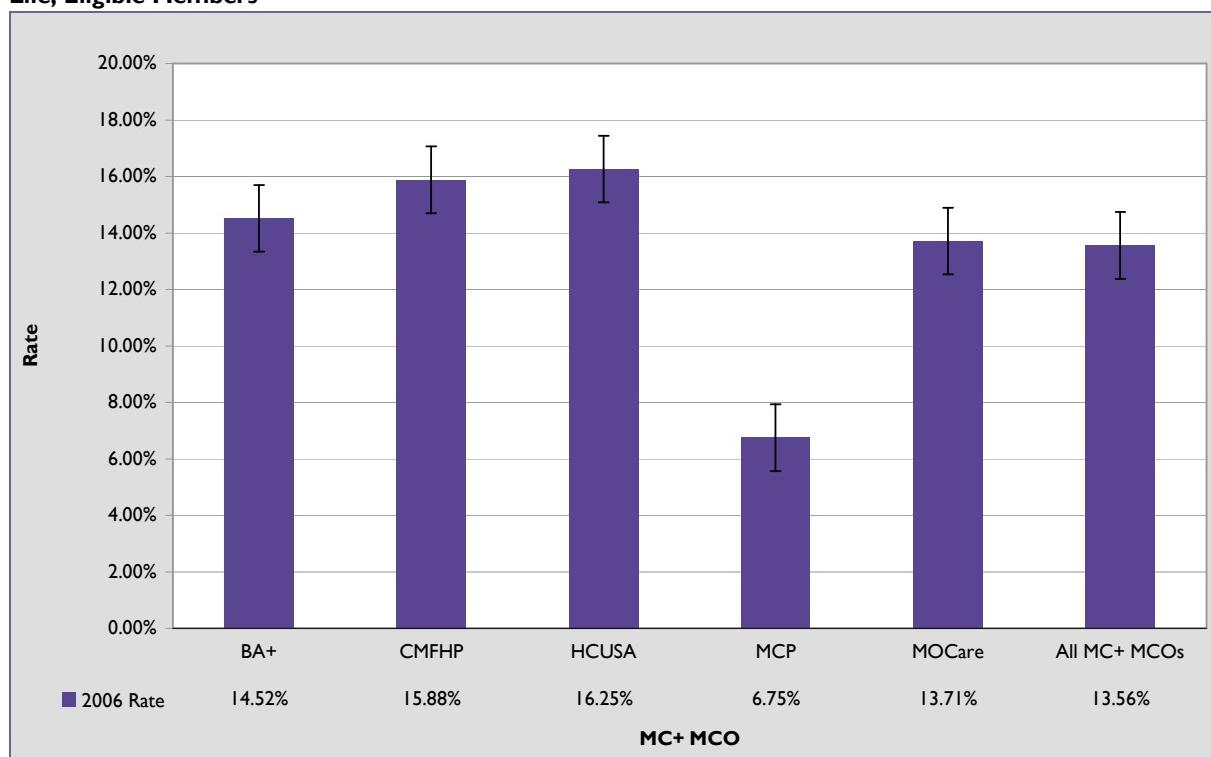
Item	Audit Elements	MC+ MCO					All MC+ MCOs				
		BA+	CMFHP	HCUSA	MCP	MOCare	Number Met	Number Partially Met	Number Not Met	Number Applicable	Rate Met
10.1	All members who were eligible to receive the specified services were included in the initial population from which the final denominator was produced. This "at risk" population included both members who received the services, as well as those who did not. This same standard applies to provider groups or other relevant populations identified in the specifications of each performance measure.	2	2	2	2	2	5	0	0	5	100.0%
10.2	For each measure, programming logic or source code which identifies, tracks, and links member enrollment within and across product lines (e.g., Medicare and Medicaid), by age and sex, as well as through possible periods of enrollment and disenrollment, has been appropriately applied according to the specifications of each performance measure.	2	2	2	2	2	5	0	0	5	100.0%
10.3	Calculations of continuous enrollment criteria were correctly carried out and applied to each measure (if applicable).	2	2	2	2	2	5	0	0	5	100.0%
10.4	Proper mathematical operations were used to determine patient age or range.	2	2	2	2	2	5	0	0	5	100.0%
10.5	The MCO/PIHP can identify the variable(s) that define the member's sex in every file or algorithm needed to calculate the performance measure denominator, and the MCO/PIHP can explain what classification is carried out if neither of the required codes is present.	NA	NA	NA	NA	NA	0	0	0	0	NA
10.6	The MCO/PIHP has correctly calculated member months and member years, if applicable to the performance measure.	NA	NA	NA	NA	NA	0	0	0	0	NA
10.7	The MCO/PIHP has properly evaluated the completeness and accuracy of any codes used to identify medical events, such as diagnoses, procedures, or prescriptions, and these codes have been appropriately identified and applied as specified in each performance measure.	2	2	2	2	2	5	0	0	5	100.0%
10.8	Any time parameters required by the specifications of the performance measure are followed (e.g., cut off dates for data collection, counting 30 calendar days after discharge from a hospital, etc.).	2	2	2	2	2	5	0	0	5	100.0%
10.9	members from a denominator were followed. For example, if a measure relates to receipt of a specific service, the denominator may need to be adjusted to reflect instances in which the patient refuses the service or the service is contraindicated.	2	2	2	2	2	5	0	0	5	100.0%
10.10	Systems or methods used by the MCO/PIHP to estimate populations when they cannot be accurately or completely counted (e.g., newborns) are valid.	NA	NA	NA	NA	NA	0	0	0	0	NA
	Number Met	7	7	7	7	7	35	0	0	35	100.0%
	Number Partially Met	0	0	0	0	0					
	Number Not Met	0	0	0	0	0					
	Number Applicable	7	7	7	7	7					
	Rate Met	100.0%	100.0%	100.0%	100.0%	100.0%					

**Note:** A = Administrative; H = Hybrid; NA = Not Applicable to the method employed by the MC+ MCO; Administrative Method was used by the MC+ MCO and the item relates to the Hybrid Method; 2 = Met and validated through HEDIS software certification process and proper explanation in documentation or proper explanation in documentation. I = Partially Met; 0 = Not Met, validated through HEDIS software certification process, but no proper explanation of the process in documentation or no or insufficient explanation in documentation.

Source: BHC, Inc. 2006 External Quality Review Performance Measure Validation.

Figure 10 illustrates the rate of eligible members identified by each MC+ MCO, based on the enrollment of all MC+ MCO Waiver Recipients as of December 31, 2005 (the end of the CY2005 measurement year). It was expected that MC+ MCOs would identify similar proportions of eligible members for the HEDIS 2006 Well-Child Visits measure. The rate of eligible members (percent of eligible members divided by the total enrollment) was calculated for all MC+ MCOs and two-tailed z-tests of each MC+ MCO compared to the state rate of eligible members were conducted at the 95% level of confidence.

**Figure 10 - MC+ Managed Care Program HEDIS 2006 Well-Child Visits in the 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> Years of Life, Eligible Members**



Note: Error bars on the y-axis represent 95% confidence intervals; \* Indicates values are significant at the 95% level of significance, two-tailed z-test.

Sources: MC+ MCO HEDIS 2006 Data Submission Tool (DST); National Committee for Quality Assurance (NCQA).

## Processes Used to Produce Numerators

The objectives of this activity were to evaluate the MC+ MCOs' ability to accurately identify medical events, evaluate the ability to identify events from other sources, evaluate procedures for non-duplicate counting of multiple events, review time parameters and the use of non-standard code maps, and assess the processes and procedures for collecting and incorporating medical record review data. For the HEDIS 2006 Well-Child Visits measure, the sources of data included enrollment, eligibility, and claim files. Table 29 shows the numerators, denominators, rates, and confidence intervals submitted by the MC+ MCOs to the SPHA on the DST. The "combined" rate for HealthCare USA was calculated by the EQRO based on reported rates for each region (Central, Eastern, and Western); thus, there is no confidence interval to report. The EQRO also calculated the rate for all MC+ MCOs; this statewide rate also does not have a confidence interval reported. The rate for all MC+ MCOs was 58.19%, with MC+ MCO rates ranging from 55.70% (Blue Advantage Plus of Kansas City) to 72.75% (Children's Mercy Family Health Partners).



**Table 29 - Data Submission for HEDIS 2006 Well-Child Visits in the 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> Years of Life Measure**

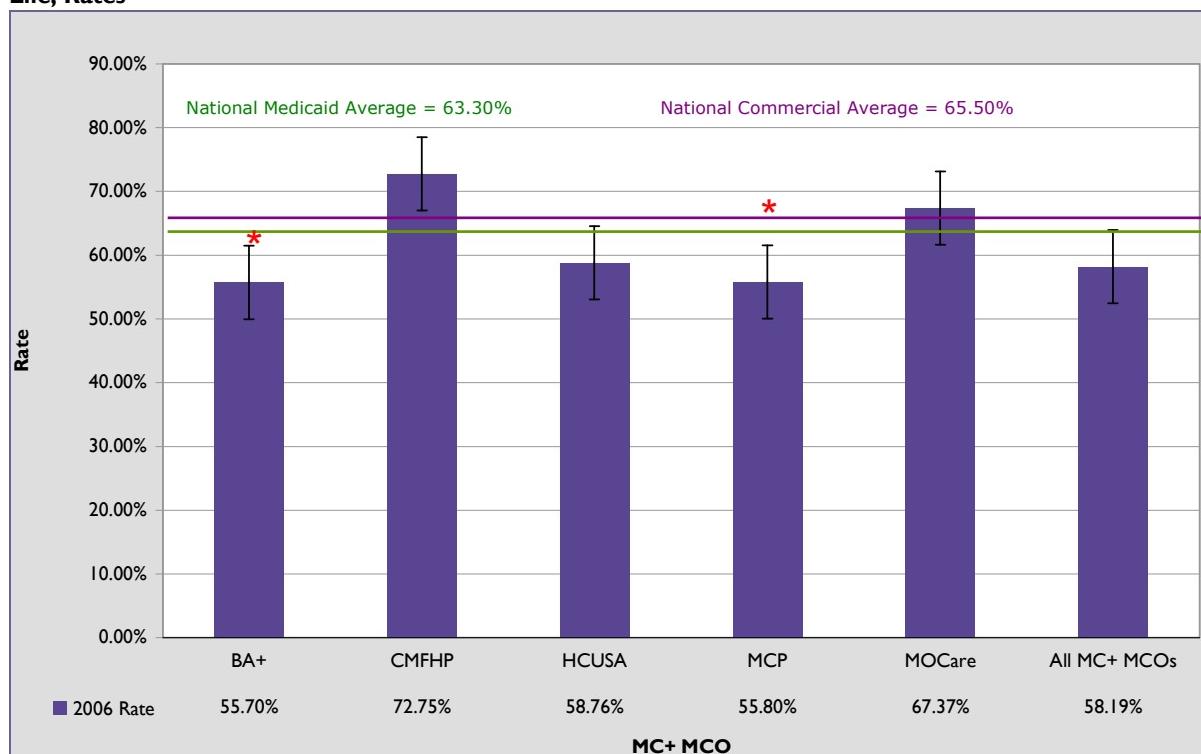
MC+ MCO	Final Data Collection Method Used	Denominator (DST)	Administrative Hits Reported by MCO (DST)	Hybrid Hits Reported by MCO (DST)	Total Hits Reported by MCO (DST)	Rate Reported by MCO (DST)	LCL - UCL (DST)
Blue Advantage Plus	Administrative	4,264	2,375	NA	2,375	55.70%	54.20% - 57.20%
Childrens Mercy Family Health Partners	Hybrid	411	223	76	299	72.75%	68.32% - 77.18%
HealthCare USA	Administrative	25,541	15,008	NA	15,008	58.76%	
Mercy CarePlus	Administrative	5555	3100	NA	3100	55.81%	54.49% - 57.12%
Missouri Care	Hybrid	380	245	11	256	67.37%	62.52% - 72.21%
<b>All MC+ MCOs</b>		<b>36,151</b>	<b>20,951</b>	<b>87</b>	<b>21,038</b>	<b>58.19%</b>	

Note: DST = Data Submission Tool; NA = Not Applicable; EQRO = External Quality Review Organization (Behavioral Health Concepts, Inc.); LCL = 95% Lower Confidence Limit; UCL = 95% Upper Confidence Limit. The EQRO is charged with providing MCO to MCO comparisons. Therefore, the numerators and denominators for HealthCare USA were aggregated across all three regions, which were each 100% validated. The statewide rate for all MC+ MCOs was calculated by the EQRO using the sum of numerators divided by sum of denominators. There was no statewide rate or confidence limits reported to the SMA or SPHA.

Source: MC+ Managed Care Organization HEDIS 2006 Data Submission Tools (DST).

Figures 11, 12 and 13 illustrate the rates reported by the MC+ MCOs and the rates of administrative and hybrid hits for each MC+ MCO. The rate reported by each MC+ MCO was compared with the rate for all MC+ MCOs. Two-tailed z-tests of each MC+ MCO comparing MC+ MCOs to the rate for all MC+ MCOs were calculated at the 95% confidence interval. The rate for all MC+ MCOs was lower than the National Commercial average (65.50%) and the National Medicaid rate (63.3%). Blue Advantage Plus of Kansas City and Mercy CarePlus reported rates (55.70% and 55.80%, respectively) that were significantly lower than the statewide rate for all MC+ MCOs. Both, Missouri Care and Children's Mercy Family Health Partners reported rates higher than the National Medicaid and National Commercial Averages.

**Figure 11 - MC+ Managed Care Program HEDIS 2006 Well-Child Visits in the 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> Years of Life, Rates**

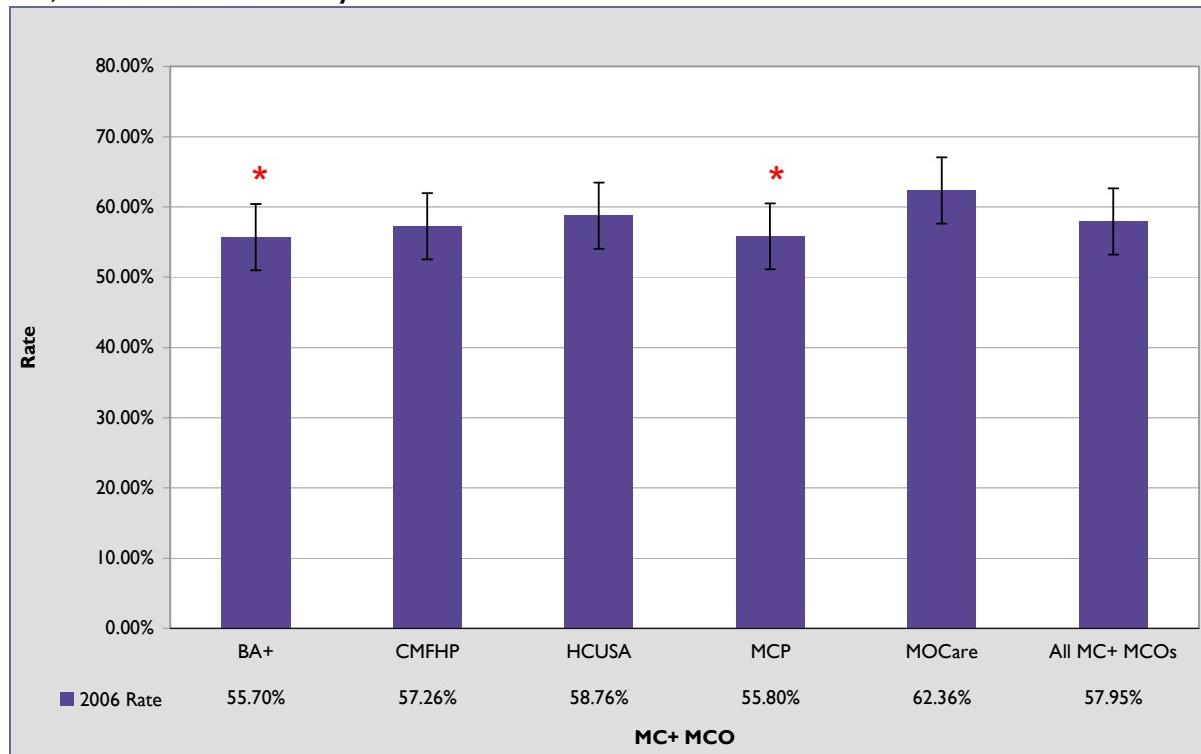


Note: Error bars on the y-axis represent 95% confidence intervals; \* Indicates values are significant at the 95% level of significance, two-tailed z-test.

Sources: MC+ MCO HEDIS 2006 Data Submission Tool (DST); National Committee for Quality Assurance (NCQA).

When the rate of administrative and hybrid hits was examined separately, there was not a great deal of variability among MC+ MCOs from the administrative rate for all MC+ MCOs (57.95%). Rates ranged from 55.70% (Blue Advantage Plus of Kansas City) to 62.36% (Missouri Care). Statistically, the rates reported by Blue Advantage Plus of Kansas City and Mercy CarePlus were significantly lower than the statewide rate for all MC+ MCOs.

**Figure 12 - MC+ Managed Care Program HEDIS 2006 Well-Child Visits in the 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> Years of Life, Administrative Rate Only**

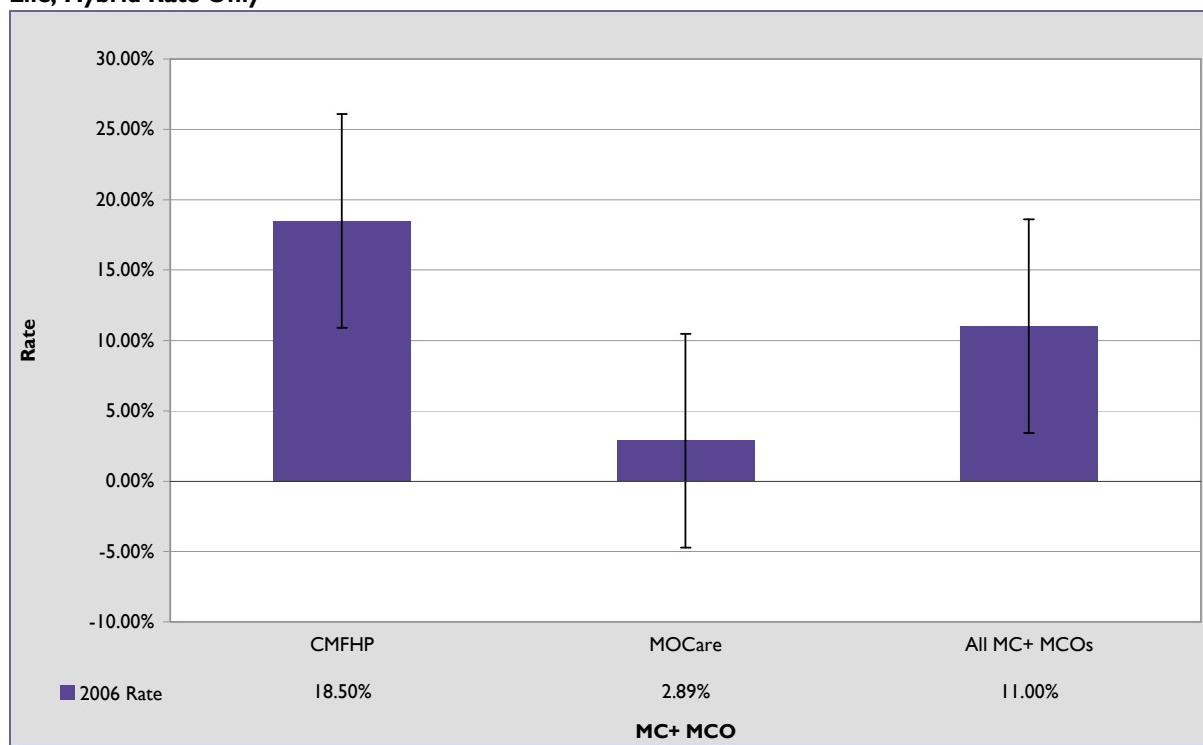


**Note:** Error bars on the y-axis represent 95% confidence intervals; \* Indicates values are significant at the 95% level of significance, two-tailed z-test.

Source: MC+ MCO HEDIS 2006 Data Submission Tool (DST).

Only two of the five MC+ MCOs calculated the Well-Child Visits measure hybridly. There were no statistically significant differences in these rates.

**Figure 13 - MC+ Managed Care Program HEDIS 2006 Well-Child Visits in the 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> Years of Life, Hybrid Rate Only**



**Note:** Error bars on the y-axis represent 95% confidence intervals; \* Indicates values are significant at the 95% level of significance, two-tailed z-test.

Source: MC+ MCO HEDIS 2006 Data Submission Tool (DST).

Tables 30 and 31 summarize the findings of the EQRO medical record review validation and CMS Protocol Validating Performance Measures Attachment XII (Impact of Medical Record Findings)

Two of the MC+ MCOs (Children's Mercy Family Health Partners and Missouri Care) used the Hybrid Method of calculation. Children's Mercy Family Health Partners selected a sample of 411 eligible members, consistent with HEDIS technical specifications. Missouri Care selected a sample of 380 eligible members, as determined by the number of eligible members and in accordance with HEDIS technical specifications. A total of 41 of the 87 reported medical record hybrid hits by MC+ MCOs were sampled for validation by the EQRO. Of the records requested, 40 medical records were received for review. The EQRO was able to validate 27 of the 40 records received, an Error Rate of 34.1% across all MC+ MCOs. The number of False Positive Records (the total amount that could not be validated) was 30 of the 87 reported hits. The estimated bias for individual MC+ MCOs based on the medical record validation ranged from a 0.0% to 8.6% overestimate in the rate, with an average overestimate of 3.8% for all MC+ MCOs. Table 31 shows the impact of the medical record review findings.



**Table 30 - Medical Record Validation for HEDIS 2006 Well-Child Visits in the 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> Years of Life Measure**

MC+ MCO	Denominator (Sample Size)	Numerator Hits by Medical Records (DST)	Number Medical Records Sampled for Audit by EQRO	Number Medical Records Received for Audit by EQRO	Number Medical Records Validated by EQRO	Rate Validated of Records Received	Accuracy Rate	Error Rate	Weight of Each Medical Record
Childrens Mercy Family Health Partners	411	76	30	29	16	55.2%	53.3%	46.7%	0.002
Missouri Care	380	11	11	11	11	100.0%	100.0%	0.0%	0.003
All MC+ MCOs	791	87	41	40	27	67.5%	65.9%	34.1%	0.0013

Note: DST = Data Submission Tool; EQRO = External Quality Review Organization (Behavioral Health Concepts, Inc.); Accuracy Rate = Number of Medical Records Validated by the EQRO/Number of Records Selected for Audit by EQRO; Error Rate = 100% - Accuracy Rate; Weight of Each Medical Record = 100% / Denominator (Sample Size); Estimated Bias from Medical Records = Percent of bias due to the medical record review = False Positive Rate \* Weight of Each Medical Record.

Source: MC+ MCO Data Submission Tools (DST); BHC, Inc. 2006 External Quality Review Performance Measures Validation.

**Table 31 - Impact of Medical Record Findings, HEDIS 2006 Well Child Visits in the 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> Years of Life Measure**

Item	Audit Elements	MC+ MCO				
		BA+	CMFHP	HCUSA	MCP	MOCare
12.1	Final Data Collection Method Used (e.g., MRR, hybrid,)	Administrative	Hybrid	Administrative	Administrative	Hybrid
12.2	Error Rate (Percentage of records selected for audit that were identified as not meeting numerator requirements)	NA	46.70%	NA	NA	0.00%
12.3	Is error rate < 10%? (Yes or No)	NA	No	NA	NA	Yes
	If yes, MCO/PIHP passes MRR validation; no further MRR calculations are necessary.	NA		NA	NA	Passes
	If no, the rest of the spreadsheet will be completed to determine the impact on the final rate.	NA	See below	NA	NA	NA
12.4	Denominator (The total number of members identified for the denominator of this measure, as identified by the MCO/PIHP)	4264	411	25541	5555	380
12.5	Weight of Each Medical Record (Impact of each medical record on the final overall rate; determined by dividing 100% by the denominator)	NA	0.002	NA	NA	NA
12.6	Total Number of MRR Numerator Positives identified by the MCO/PIHP using MRR.	NA	76	NA	NA	NA
12.7	Expected Number of False Positives (Estimated number of medical records inappropriately counted as numerator positives)	NA	35	NA	NA	NA
12.8	Estimated Bias in Final Rate (The amount of bias caused by medical record review)	NA	8.64%	NA	NA	NA

Table 32 shows the validation of numerators based on the review of numerator extract files and the medical record review. Items 13.8 through 13.13 relate to the Hybrid Method and were not applicable to Blue-Advantage Plus of Kansas City, HealthCare USA, or Mercy CarePlus. Item 13.2 does not apply to this measure as is it unlikely members would receive Well-Child Visit services outside the MCO. Item 13.6 did not apply to any of the MC+ MCOs, as none of the MCOs used non-standard codes. Across MC+ MCOs, 100% of the criteria for calculating numerators were met. All five (100%) of the MC+ MCOs Met the criteria for using the appropriate data to identify the at-risk population, using complete medical event codes, correctly classifying members for inclusion in the numerator, eliminating or avoiding double-counting members, and following applicable time parameters. Two of the five MCOs calculated this measure using the Hybrid Method (Missouri Care and Children's Mercy Family Health Partners). Both Met all criteria (100.0%) relating to medical record reviews and data. The MC+ MCOs Met 100.0% of criteria for calculating the numerator for the HEDIS 2006 Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life measure.



**Table 32 - Numerator Validation Findings, HEDIS 2005 Well-Child Visits in the 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> Years of Life Measure**

Item	Audit Elements	MC+ MCO					All MC+ MCOs				
		BA+	CMFHP	HCUSA	MCP	MOCare	Number Met	Number Partially Met	Number Not Met	Number Applicable	Rate Met
13.1	The MCO/PIHP has used the appropriate data, including linked data from separate data sets, to identify the entire at-risk population.	2	2	2	2	2	5	0	0	5	100.0%
13.2	The MCO/PIHP has in place and utilizes procedures to capture data for those performance indicators that could be easily under-reported due to the availability of services outside the MCO/PIHP.	NA	NA	NA	NA	NA	0	0	0	0	NA
13.3	The MCO's/PIHP's use of codes used to identify medical events are complete, accurate, and specific in correctly describing what has transpired and when.	2	2	2	2	2	5	0	0	5	100.0%
13.4	The MCO/PIHP correctly evaluated medical event codes when classifying members for inclusion or exclusion in the numerator.	2	2	2	2	2	5	0	0	5	100.0%
13.5	The MCO/PIHP has avoided or eliminated all double-counted members or numerator events.	2	2	2	2	2	5	0	0	5	100.0%
13.6	Any non-standard codes used in determining the numerator have been mapped to a standard coding scheme in a manner that is consistent, complete, and reproducible as evidenced by a review of the programming logic or a demonstration of the program.	NA	NA	NA	NA	NA	0	0	0	0	NA
13.7	Any time parameters required by the specifications of the performance measure are adhered to (i.e., that the measured event occurred during the time period specified or defined in the performance measure).	2	2	2	2	2	5	0	0	5	100.0%
13.8	Medical record reviews and abstractions have been carried out in a manner that facilitates the collection of complete, accurate, and valid data.	NA	2	NA	NA	2	2	0	0	2	100.0%
13.9	Record review staff have been properly trained and supervised for the task.	NA	2	NA	NA	2	2	0	0	2	100.0%
13.10	Record abstraction tools require the appropriate notation that the measured event occurred.	NA	2	NA	NA	2	2	0	0	2	100.0%
13.11	Record abstraction tools require notation of the results or findings of the measured event (if applicable).	NA	2	NA	NA	2	2	0	0	2	100.0%
13.12	Data included in the record extract files are consistent with data found in the medical records as evidenced by a review of a sample of medical record for applicable performance measures. (From Medical Record Review Validation Tools)	NA	2	NA	NA	2	2	0	0	2	100.0%
13.13	The process of integrating administrative data and medical record data for the purpose of determining the numerator is consistent and valid.	NA	2	NA	NA	2	2	0	0	2	100.0%
	Number Met	5	11	5	5	11	37	0	0	37	100.0%
	Number Partially Met	0	0	0	0	0					
	Number Not Met	0	0	0	0	0					
	Number Applicable	5	11	5	5	11					
	Rate Met	100.0%	100.0%	100.0%	100.0%	100.0%					

Note: A = Administrative; H = Hybrid; NA = Not Applicable to the method employed by the MC+ MCO; Administrative Method was used by the MC+ MCO and the item relates to the Hybrid Method; 2 = Met and validated through HEDIS software certification process and proper explanation in documentation or proper explanation in documentation. I = Partially Met; 0 = Not Met, validated through HEDIS software certification process, but no proper explanation of the process in documentation or no or insufficient explanation in documentation. Rate Met = Number Met / Number Applicable.

Source: BHC, Inc. 2006 External Quality Review Performance Measure Validation.

### **Sampling Procedures for Hybrid Method**

The objectives of this activity were to evaluate the MC+ MCOs' ability to randomly sample from the eligible members for the measure when using the Hybrid Method of calculation. Table 33 summarizes the findings of CMS Protocol Validating Performance Measures Attachment XV (Sampling Validation Findings). Items 15.3 (each provider had an equal chance of being sampled) and 15.9 (documenting if the requested sample size exceeded the eligible population size) did not apply to any of the MC+ MCOs for this measure; and none of the items were applicable to Blue-Advantage Plus of Kansas City, HealthCare USA, or Mercy CarePlus. Across all MC+ MCOs, the criteria for sampling were Met 100.0% of the time. The MC+ MCOs using the Hybrid Method of calculating the HEDIS 2006 Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life measure Met 100.0% of the criteria for proper sampling.

### **SUBMISSION OF MEASURES TO THE STATE**

Reports from the SPHA were obtained regarding the submission of the HEDIS 2006 Well-Child Visits measure. All MC+ MCOs reported the measure to the SPHA and SMA.



**Table 33 - Sampling Validation Findings, HEDIS 2006 Well-Child Visits in the 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> Years of Life Measure**

Item	Audit Elements	MC+ MCO					All MC+ MCOs				
		BA+	CMFHP	HCUSA	MCP	MOCare	Number Met	Number Partially Met	Number Not Met	Number Applicable	Rate Met
15.1	Each relevant member or provider had an equal chance of being selected; no one was systematically excluded from the sampling.	NA	2	NA	NA	2	2	0	0	2	100.0%
15.2	The MCO / PIHP followed the specifications set forth in the performance measure regarding the treatment of sample exclusions and replacements, and if any activity took place involving replacements of or exclusions from the sample, the MCO/PIHP kept adequate documentation of that activity.	NA	2	NA	NA	2	2	0	0	2	100.0%
15.3	Each provider serving a given number of enrollees had the same probability of being selected as any other provider serving the same number of enrollees.	NA	NA	NA	NA	NA	0	0	0	0	NA
15.4	any bias was detected, the MCO/PIHP is able to provide documentation that describes any efforts taken to correct it.	NA	2	NA	NA	2	2	0	0	2	100.0%
15.5	The sampling methodology employed treated all measures independently, and there is no correlation between drawn samples.	NA	2	NA	NA	2	2	0	0	2	100.0%
15.6	Relevant members or providers who were not included in the sample for the baseline measurement had the same chance of being selected for the follow-up measurement as providers who were included in the baseline.	NA	2	NA	NA	2	2	0	0	2	100.0%
15.7	The MCO/PIHP has policies and procedures to maintain files from which the samples are drawn in order to keep the population intact in the event that a sample must be re-drawn, or replacements made, and documentation that the original population is intact.	NA	2	NA	NA	2	2	0	0	2	100.0%
15.8	Sample sizes meet the requirements or the performance measure specifications.	NA	2	NA	NA	2	2	0	0	2	100.0%
15.9	The MCO/PIHP has appropriately handled the documentation and reporting of the measure if the requested sample size exceeds the population size.	NA	NA	NA	NA	NA	0	0	0	0	NA
15.10	The MCO/PIHP properly oversampled in order to accommodate potential exclusions	NA	2	NA	NA	2	2	0	0	2	100.0%
15.11	Substitution applied only to those members who met the exclusion criteria specified in the performance measure definitions or requirements.	NA	2	NA	NA	2	2	0	0	2	100.0%
15.12	and the percentage of substituted records was documented.	NA	2	NA	NA	2	2	0	0	2	100.0%
	Number Met	0	10	0	0	10	20	0	0	20	100.0%
	Number Partially Met	0	0	0	0	0					
	Number Not Met	0	0	0	0	0					
	Number Applicable	0	10	0	0	10					
	Rate Met	NA	100.0%	NA	NA	100.0%					

Note: A = Administrative; H = Hybrid; NA = Not Applicable to the method employed by the MC+ MCO; Administrative Method was used by the MC+ MCO and the item relates to the Hybrid Method; 2 = Met and validated through HEDIS software certification process and proper explanation in documentation or proper explanation in documentation. I = Partially Met; 0 = Not Met, validated through HEDIS software certification process, but no proper explanation of the process in documentation or no or insufficient explanation in documentation.

Source: BHC, Inc. 2006 External Quality Review Performance Measure Validation.

## Final Validation Findings

Table 34 shows the final data validation findings for the calculation of the HEDIS 2006 Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life measure and the total estimated bias in calculation based on the validation of medical record data and review of the MC+ MCO extract files. Figure 14 illustrates the differences between the rates reported to the SPHA and those calculated by the EQRO. The rate for all MC+ MCOs calculated based on data validated by the EQRO was 57.64%, while the rate reported by MC+ MCOs was 58.23%, a 0.59% overestimate.

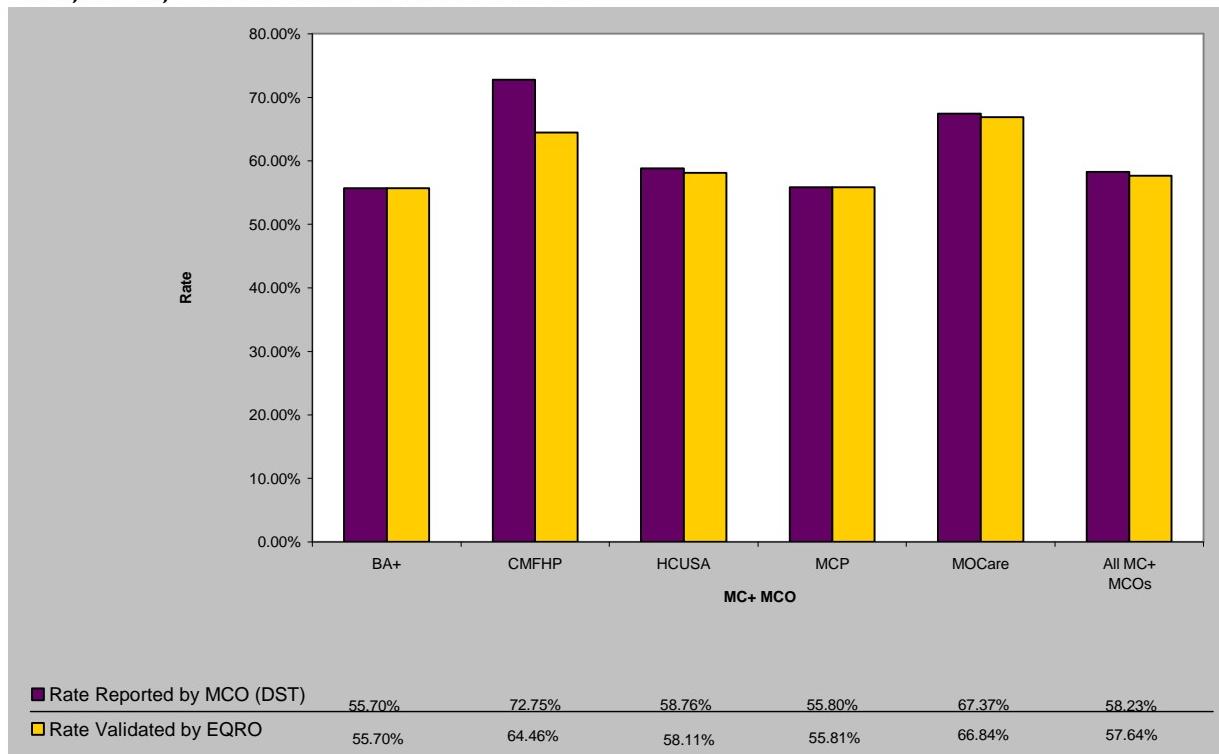
**Table 34 - Final Data Validation for HEDIS 2006 Well-Child Visits in the 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> Years of Life Measure**

MC+ MCO	Administrative Hits Validated by EQRO	Percentage of Medical Record Hits Validated by EQRO*	Total Hits Validated by EQRO	Rate Reported by MCO (DST)	Rate Validated by EQRO	Total Estimated Bias
Blue Advantage Plus	2375	NA	2375	55.70%	55.70%	0.00%
Childrens Mercy Family Health Partners	223	53.33%	265	72.75%	64.46%	8.29%
HealthCare USA (all 3 regions)	14842	NA	14842	58.76%	58.11%	0.65%
Mercy CarePlus	3100	NA	3100	55.80%	55.81%	-0.01%
Missouri Care	243	100.00%	254	67.37%	66.84%	0.53%
<b>All MC+ MCOs</b>	<b>20783</b>		<b>20836</b>	<b>58.23%</b>	<b>57.64%</b>	<b>0.59%</b>

Note: NA = Not Applicable; EQRO = External Quality Review Organization (Behavioral Health Concepts, Inc.); DST = Data Submission Tool; Administrative/Medical Record Hits Validated by EQRO = Hits the EQRO was able to reproduce from the data provided by the MCO; Total Hits Validated by EQRO = Administrative Hits Validated by EQRO + Medical Record Hits Validated by EQRO; False Positive Records = Error Rate \* Rate Reported by MCO; Rate Validated by EQRO = Total Hits Validated by EQRO / Denominator (DST); Total Estimated Bias = Rate Reported by MC+ MCO - Rate Validated by EQRO. Positive numbers represent an overestimate by the MCO.

Sources: MC+ Managed Care Organization HEDIS 2006 data Submission Tools (DST); BHC, Inc. External Quality Review Performance Measure Validation.

**Figure I4 - Rates Reported by MC+ MCOs and Validated by EQRO, HEIDS 2006 Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life Measure**



Sources: MC+ MCO HEDIS 2005 Data Submission Tool (DST); BHC, Inc., 2006 External Quality Review Performance Measure Validation.

## HEDIS 2006 FOLLOW-UP AFTER HOSPITALIZATION FOR MENTAL ILLNESS

### Data Integration and Control

The objective of this activity was to assess the MC+ MCOs' ability to link data from multiple sources. It is based on the integrity of the management information systems and the ability to ensure accuracy of the measures. For the HEDIS 2006 Follow-up After Hospitalization for Mental Illness measure, the sources of data included enrollment, eligibility, and claim files. Table 35 summarizes the findings of [CMS Protocol Validating Performance Measures Attachment V \(Data Integration and Control Findings\)](#). The rate of items that were Met was calculated across MC+ MCOs and from the number of applicable items for each MC+ MCO.

Across all MC+ MCOs, 100.0% of the criteria were Met. Each MC+ MCO calculating the measure Met 100.0% of the criteria for data integration and control.



**Table 35 - Data Integration and Control Findings, HEDIS 2006 Follow-up After Hospitalization for Mental Illness**

Item	Audit Elements	MC+ MCO					All MC+ MCOs				
		BA+	CMFHP	HCUSA	MCP	MOCare	Number Met	Number Partially Met	Number Not Met	Number Applicable	Rate Met
5.1	MCO/PIHP processes accurately and completely transfer data from the transaction files (e.g., membership, provider, encounter/claims) into the repository used to keep the data until the calculations of the performance measures have been completed and validated.	2	2	2	2	2	5	0	0	5	100.0%
5.2	Samples of data from repository are complete and accurate.	2	2	2	2	2	5	0	0	5	100.0%
5.3	MCO's/PIHP's processes to consolidate diversified files, and to extract required information from the performance measure repository are appropriate.	2	2	2	2	2	5	0	0	5	100.0%
5.4	Actual results of file consolidations or extracts were consistent with those which should have resulted according to documented algorithms or specifications.	2	2	2	2	2	5	0	0	5	100.0%
5.5	Procedures for coordinating the activities of multiple subcontractors ensure the accurate, timely, and complete integration of data into the performance measure database.	2	2	2	2	2	5	0	0	5	100.0%
5.6	Computer program reports or documentation reflect vendor coordination activities, and no data necessary to performance measure reporting are lost or inappropriately modified during transfer.	2	2	2	2	2	5	0	0	5	100.0%
5.7	The repository's design, program flow charts, and source codes enable analyses and reports.	2	2	2	2	2	5	0	0	5	100.0%
5.8	Proper linkage mechanisms have been employed to join data from all necessary sources (e.g., identifying a member with a given disease/condition).	2	2	2	2	2	5	0	0	5	100.0%
5.9	Examine and assess the adequacy of the documentation governing the production process, including MCO/PIHP production activity logs, and MCO/PIHP staff review of report runs.	2	2	2	2	2	5	0	0	5	100.0%
5.10	Prescribed data cutoff dates were followed.	2	2	2	2	2	5	0	0	5	100.0%
5.11	The MCO/PIHP has retained copies of files or databases used for performance measure reporting, in the event that results need to be reproduced.	2	2	2	2	2	5	0	0	5	100.0%
5.12	Review documentation standards to determine the extent to which the reporting software program is properly documented with respect every aspect of the performance measurement reporting repository, including building, maintaining, managing, testing, and report production.	2	2	2	2	2	5	0	0	5	100.0%
5.13	Review the MCO's/PIHP's processes and documentation to determine the extent to which they comply with the MCO/PIHP standards associated with reporting program specifications, code review, and testing.	2	2	2	2	2	5	0	0	5	100.0%
	Number Met	13	13	13	13	13	65	0	0	65	100.0%
	Number Partially Met	0	0	0	0	0					
	Number Not Met	0	0	0	0	0					
	Number Applicable	13	13	13	13	13					
	Rate Met	100.0%	100.0%	100.0%	100.0%	100.0%					

Note: A = Administrative; H = Hybrid; NA = Not Applicable to the method employed by the MC+ MCO; Administrative Method was used by the MC+ MCO and the item relates to the Hybrid Method; 2 = Met and validated through HEDIS software certification process and proper explanation in documentation or proper explanation in documentation. I = Partially Met; 0 = Not Met, validated through HEDIS software certification process, but no proper explanation of the process in documentation or no or insufficient explanation in documentation.

Source: BHC, Inc. 2006 External Quality Review Performance Measure Validation.

## Documentation of Data and Processes

The objectives of this activity were to assess the documentation of data collection; the process of integrating data into a performance measure set; the procedures used to query the data set for sampling, numerators and denominators; and the ability to apply proper algorithms. Table 36 summarizes the findings of [CMS Protocol Validating Performance Measures Attachment VI \(Data and Processes Used to Calculate and Report Performance Measures\)](#). Items 7.3 (statistical testing of results and corrections made after processing), 7.5 (detailed medical record review methods and practices), 7.7 (sampling techniques), 7.9 (data consistency from measure to measure), and 7.10 (appropriate statistical functions for confidence intervals) did not apply to the measure, as the measure must be calculated using only the Administrative method. Item 7.2 did not apply as none of the MC+ MCOs used non-standard codes. Item 7.4 is also not applicable as a member would not receive services for this measure outside of the MCO's system. Across all MC+ MCOs, 90.0% of the criteria for calculating and reporting performance measures were Met. All MC+ MCOs (100.0%) Met the criteria for following data file and field definitions and the integration of external data and demonstration of detailed queries for identifying eligible members. Four of the five MC+ MCOs used the calculation of statistical significance in rates from year to year as a measure of the significance of fluctuation in the measure; Mercy CarePlus did not (see items 7.8 and 7.11). Each MC+ MCO Met 50.0% to 100.0% of the criteria for calculating and reporting performance measures.



**Table 36 - Data and Processes Used to Calculate and Report Performance Measures, HEDIS 2006 Follow-up After Hospitalization for Mental Illness**

Item	Audit Elements	MC+ MCO					All MC+ MCOs				
		BA+	CMFHP	HCUSA	MCP	MOCare	Number Met	Number Partially Met	Number Not Met	Number Applicable	Rate Met
7.1	Data file and field definitions used for each measure.	2	2	2	2	2	5	0	0	5	100.0%
7.2	Maps to standard coding if not used in original data collection.	NA	NA	NA	NA	NA	0	0	0	0	NA
7.3	Statistical testing of results and any corrections or adjustments made after processing.	NA	NA	NA	NA	NA	0	0	0	0	NA
7.4	All data sources, including external data (whether from a vendor, public registry, or other outside source), and any prior years' data (if applicable).	NA	NA	NA	NA	NA	0	0	0	0	NA
7.5	Detailed medical record review methods and practices, including the qualifications of medical record review supervisor and staff; reviewer training materials; audit tools used, including completed copies of each record-level reviewer determination; all case-level critical performance measure data elements used to determine a positive or negative event or exclude a case from same; and inter-rater reliability testing procedures and results.	NA	NA	NA	NA	NA	0	0	0	0	NA
7.6	Detailed computer queries, programming logic, or source code used to identify the population or sample for the denominator and/or numerator.	2	2	2	2	2	5	0	0	5	100.0%
7.7	If sampling used, description of sampling techniques, and documentation that assures the reviewer that samples used for baseline and repeat measurements of the performance measures were chosen using the same sampling frame and methodology.	NA	NA	NA	NA	NA	0	0	0	0	NA
7.8	Documentation of calculation for changes in performance from previous periods (if applicable), including statistical tests of significance.	2	2	2	0	2	4	0	1	5	80.0%
7.9	Data that are related from measure to measure are consistent (e.g., membership counts, provider totals, number of pregnancies and births).	NA	NA	NA	NA	NA	0	0	0	0	NA
7.10	Appropriate statistical functions are used to determine confidence intervals when sampling is used in the measure.	NA	NA	NA	NA	NA	0	0	0	0	NA
7.11	When determining improvement in performance between measurement periods, appropriate statistical methodology is applied to determine levels of significance of changes.	2	2	2	0	2	4	0	1	5	80.0%
	Number Met	4	4	4	2	4	18	0	2	20	90.0%
	Number Partially Met	0	0	0	0	0					
	Number Not Met	0	0	0	2	0					
	Number Applicable	4	4	4	4	4					
	Rate Met	100.0%	100.0%	100.0%	50.0%	100.0%					

**Note:** A = Administrative; H = Hybrid; NA = Not Applicable to the method employed by the MC+ MCO; Administrative Method was used by the MC+ MCO and the item relates to the Hybrid Method; 2 = Met and validated through HEDIS software certification process and proper explanation in documentation or proper explanation in documentation. I = Partially Met; 0 = Not Met, validated through HEDIS software certification process, but no proper explanation of the process in documentation or no or insufficient explanation in documentation. Rate Met = Number Met / Number Applicable.  
 Source: BHC, Inc. 2006 External Quality Review Performance Measure Validation.

## Processes Used to Produce Denominators

The objective of this activity was to determine the extent to which all eligible members were included in the denominator, evaluate the programming and logic source codes, and evaluate the specifications for each measure. For the HEDIS 2006 Follow-up After Hospitalization for Mental Illness measure, the sources of data include enrollment, eligibility, and claim files. Table 37 summarizes the findings of [CMS Protocol Validating Performance Measures Attachment X](#) (Denominator Validation Findings). Items 10.5 (identification of gender of the member), 10.6 (calculation of member months or years), and 10.10 (systems for estimating populations when they are unable to accurately be counted) were not applicable to this measure. Across all MC+ MCOs, 100.0% of criteria for calculating and reporting performance measures were Met. Each MC+ MCO Met 100.0% of the criteria for the process used to produce denominators.



**Table 37 - Denominator Validation Findings, HEDIS 2006 Follow-up After Hospitalization for Mental Illness**

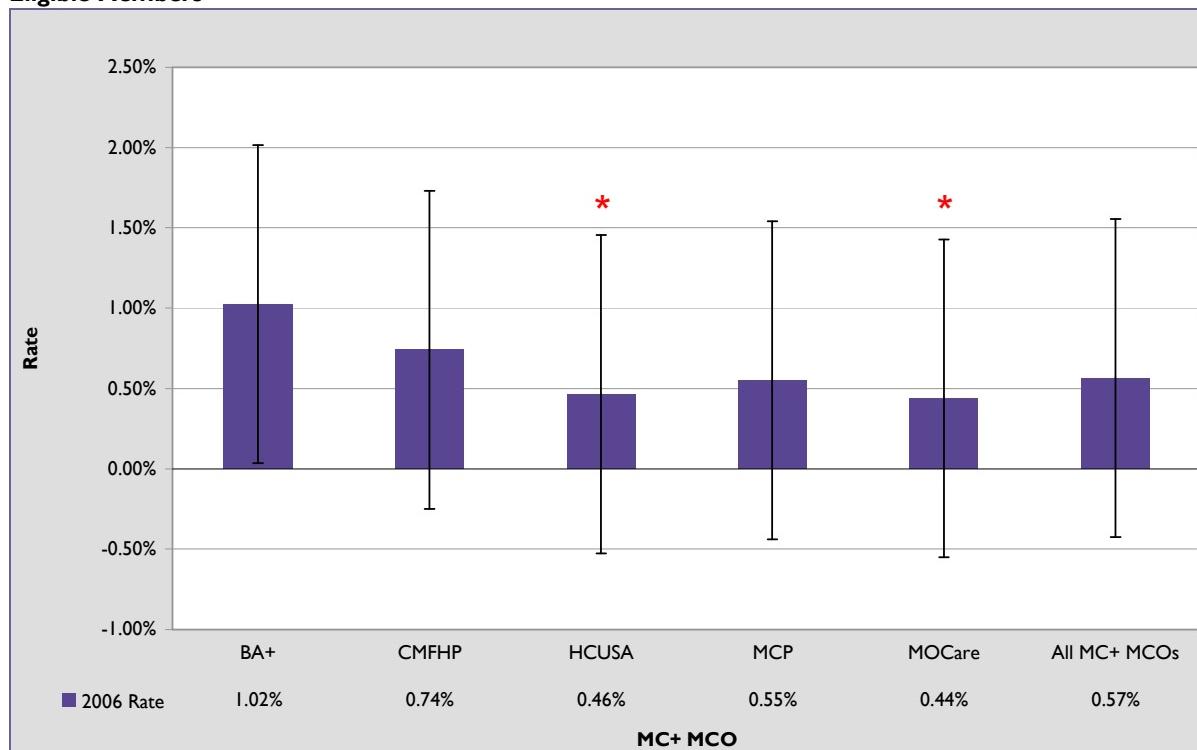
Item	Audit Elements	MC+ MCO					All MC+ MCOs				
		BA+	CMFHP	HCUSA	MCP	MOCare	Number Met	Number Partially Met	Number Not Met	Number Applicable	Rate Met
10.1	All members who were eligible to receive the specified services were included in the initial population from which the final denominator was produced. This "at risk" population included both members who received the services, as well as those who did not. This same standard applies to provider groups or other relevant populations identified in the specifications of each performance measure.	2	2	2	2	2	5	0	0	5	100.0%
10.2	For each measure, programming logic or source code which identifies, tracks, and links member enrollment within and across product lines (e.g., Medicare and Medicaid), by age and sex, as well as through possible periods of enrollment and disenrollment, has been appropriately applied according to the specifications of each performance measure.	2	2	2	2	2	5	0	0	5	100.0%
10.3	Calculations of continuous enrollment criteria were correctly carried out and applied to each measure (if applicable).	2	2	2	2	2	5	0	0	5	100.0%
10.4	Proper mathematical operations were used to determine patient age or range.	2	2	2	2	2	5	0	0	5	100.0%
10.5	The MCO/PIHP can identify the variable(s) that define the member's sex in every file or algorithm needed to calculate the performance measure denominator, and the MCO/PIHP can explain what classification is carried out if neither of the required codes is present.	NA	NA	NA	NA	NA	0	0	0	0	NA
10.6	The MCO/PIHP has correctly calculated member months and member years, if applicable to the performance measure.	NA	NA	NA	NA	NA	0	0	0	0	NA
10.7	The MCO/PIHP has properly evaluated the completeness and accuracy of any codes used to identify medical events, such as diagnoses, procedures, or prescriptions, and these codes have been appropriately identified and applied as specified in each performance measure.	2	2	2	2	2	5	0	0	5	100.0%
10.8	Any time parameters required by the specifications of the performance measure are followed (e.g., cut off dates for data collection, counting 30 calendar days after discharge from a hospital, etc.).	2	2	2	2	2	5	0	0	5	100.0%
10.9	members from a denominator were followed. For example, if a measure relates to receipt of a specific service, the denominator may need to be adjusted to reflect instances in which the patient refuses the service or the service is contraindicated.	2	2	2	2	2	5	0	0	5	100.0%
10.10	Systems or methods used by the MCO/PIHP to estimate populations when they cannot be accurately or completely counted (e.g., newborns) are valid.	NA	NA	NA	NA	NA	0	0	0	0	NA
	Number Met	7	7	7	7	7	35	0	0	35	100.0%
	Number Partially Met	0	0	0	0	0					
	Number Not Met	0	0	0	0	0					
	Number Applicable	7	7	7	7	7					
	Rate Met	100.0%	100.0%	100.0%	100.0%	100.0%					

Note: A = Administrative; H = Hybrid; NA = Not Applicable to the method employed by the MC+ MCO; Administrative Method was used by the MC+ MCO and the item relates to the Hybrid Method; 2 = Met and validated through HEDIS software certification process and proper explanation in documentation or proper explanation in documentation. I = Partially Met; 0 = Not Met, validated through HEDIS software certification process, but no proper explanation of the process in documentation or no or insufficient explanation in documentation. Rate Met = Number Met / Number Applicable.

Source: BHC, Inc. 2006 External Quality Review Performance Measure Validation.

Figure 15 illustrates the rate of eligible members per MC+ MCO based on the enrollment of all MC+ MCO Waiver Recipients as of December 31, 2005 (the end of the CY2005 measurement year). It was expected that MC+ MCOs would identify similar proportions of eligible members for the measure. The rate of eligible members (percent of eligible members divided by the total enrollment) was calculated for all MC+ MCOs. Two-tailed z-tests of each MC+ MCO comparing each MC+ MCO to the state rate of eligible members for all MC+ MCOs were calculated at the 95% level of confidence. HealthCare USA (0.46%) and Missouri Care (0.44%) identified significantly lower rates than the statewide rate (0.57%) for all MC+ MCOs. This could be due to differences in the composition of these particular MCOs' populations.

**Figure 15 - MC+ Managed Care Program HEDIS 2006 Follow-up After Hospitalization for Mental Illness, Eligible Members**



Note: Error bars on the y-axis represent 95% confidence intervals; \* Indicates values are significant at the 95% level of significance, two-tailed z-test. Enrollment as of the last week in December 2005 (the measurement year) was used to calculate the rate.

Sources: MC+ MCO HEDIS 2006 Data Submission Tool (DST); Missouri Department of Social Services, Division of Medical Services, State MPRI Session Screens, enrollment figures for all Waivers, December 31, 2005.

## Processes Used to Produce Numerators

The objectives of this activity were to evaluate the MC+ MCOs ability to accurately identify medical events, evaluate the ability to identify events from other sources, evaluate procedures for non-duplicate counting of multiple events, review time parameters and the use of non-standard code maps, and assess the processes and procedures for collecting and incorporating medical record review data. For the HEDIS 2006 Follow-up After Hospitalization for Mental Illness measure, the procedures for the Hybrid Method did not apply, as HEDIS 2006 technical specifications allow only for the use of the Administrative Method of calculating the measure.

Tables 38 and 39 show the numerators, denominators, rates, and confidence intervals submitted by the MC+ MCOs to the SPHA on the DST for the Follow-up After Hospitalization for Mental Illness measure. HealthCare USA reported regional rates (Eastern, Central, and Western); the EQRO combined these rates to calculate a combined rate, and thus there is no confidence interval to report. Similarly, the rate for all MC+ MCOs was calculated by the EQRO, and no confidence interval is included for the statewide rate. The 7-Day reported rate for all MC+ MCOs was 31.16% and the rate validated by the EQRO was 27.06%, a 4.10% overestimate. The 30-Day reported rate for all MC+ MCOs was 52.92% and the rate validated by the EQRO was 49.74%, a 3.18% overestimate. Figures 16 and 17 illustrate the 7-Day and 30-Day rates reported by the MC+ MCOs. The rate reported by each MC+ MCO was compared with the rate for all MC+ MCOs, with two-tailed z-tests conducted at the 95% confidence interval to compare each MC+ MCO with the rate for all MC+ MCOs. The 7-Day rate for all MC+ MCOs was lower than both the National Commercial average (55.80%) and the National Medicaid rate (39.20%). Missouri Care reported a rate (17.65%) significantly lower than the statewide rate for all MC+ MCOs (31.16%). Blue Advantage Plus of Kansas City and Children's Mercy Family Health Partners reported rates higher than the National Medicaid rate. The 30-Day rate for all MC+ MCOs (52.92%) was also lower than both the National Commercial average (75.90%) and the National Medicaid rate (56.80%). Blue Advantage Plus of Kansas City (72.76%) and Children's Mercy Family Health Partners (71.52%) reported rates higher than both the statewide rate and the National Medicaid rate. Mercy CarePlus and Missouri Care reported rates (49.10% and 47.79%, respectively) that were significantly lower than the statewide rate for all MC+ MCOs (52.92%).

**Table 38 - Data Submission and Final Data Validation for HEDIS 2006 Follow-up After Hospitalization for Mental Illness Measure (7 days)**

MC+ MCO	Eligible Population	Number Administrative Hits Reported by MCO (DST)	Rate Reported by MCO (DST)	LCL - UCL (DST)	Administrative Hits Validated by EQRO	Rate Validated by EQRO	Estimated Bias
Blue Advantage Plus	301	151	50.17%	44.35% - 55.98%	127	42.19%	7.97%
Childrens Mercy Family Health Partners	330	149	45.15%	39.43% - 50.16%	146	44.24%	0.91%
HealthCare USA	730	212	29.04%		166	22.74%	6.30%
Mercy CarePlus	454	72	25.30%*	20.04% - 30.48%	70	24.56%	0.74%
Missouri Care	136	24	17.65%	10.87% - 24.42%	19	13.97%	3.68%
<b>All MC+ MCOs</b>	<b>1,951</b>	<b>608</b>	<b>31.16%</b>		<b>528</b>	<b>27.06%</b>	<b>4.10%</b>

\* 169 Records were excluded due to contra-indications identified through administrative data. Therefore, the rate was reported using an eligible population of 454 - 169 = 285.

**Note:** DST = Data Submission Tool; NA = Not Applicable; EQRO = External Quality Review Organization (Behavioral Health Concepts, Inc.); LCL = 95% Lower Confidence Limit; UCL = 95% Upper Confidence Limit. Rate Validated by EQRO = Administrative Hits Validated by EQRO / Eligible Population. Estimated Bias = Rate Reported by MCO (DST) - Rate Validated by EQRO. Positive bias indicates an overestimate.

Source: MC+ Managed Care Organization HEDIS 2006 Data Submission Tools (DST).

**Table 39 - Data Submission and Final Data Validation for HEDIS 2006 Follow-up After Hospitalization for Mental Illness Measure (30 days)**

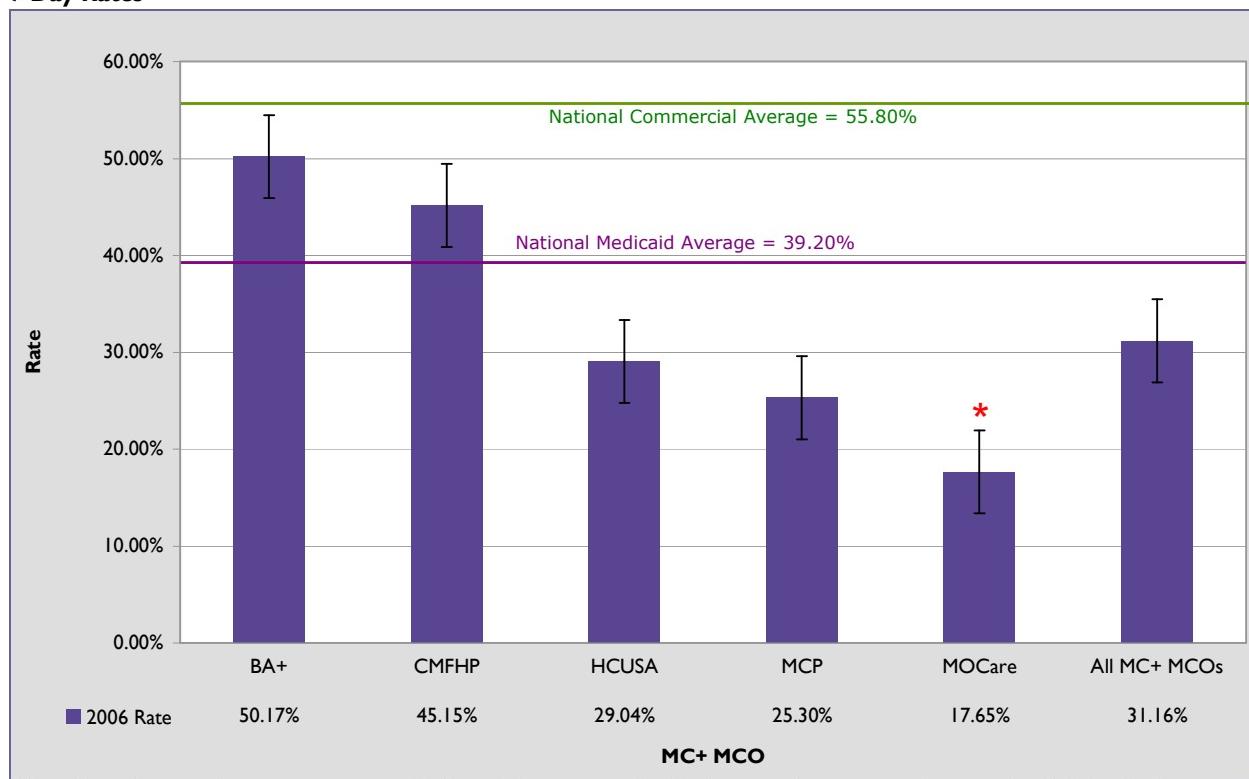
MC+ MCO	Eligible Population	Number Administrative Hits Reported by MCO (DST)	Rate Reported by MCO (DST)	LCL - UCL (DST)	Administrative Hits Validated by EQRO	Rate Validated by EQRO	Estimated Bias
Blue Advantage Plus	301	219	72.76%	67.56% - 77.95%	205	68.11%	4.65%
Childrens Mercy Family Health Partners	330	236	71.52%	66.31% - 76.08%	233	70.61%	0.91%
HealthCare USA	729	372	51.03%		327	44.86%	6.17%
Mercy CarePlus	454	140	49.10%*	43.14% - 55.10%	145	50.88%	-1.78%
Missouri Care	136	65	47.79%	39.03% - 56.56%	60	44.12%	3.68%
<b>All MC+ MCOs</b>	<b>1,950</b>	<b>1,032</b>	<b>52.92%</b>		<b>970</b>	<b>49.74%</b>	<b>3.18%</b>

\* 169 Records were excluded due to contra-indications identified through administrative data. Therefore, the rate was reported using an eligible population of 454 - 169 = 285.

**Note:** DST = Data Submission Tool; NA = Not Applicable; EQRO = External Quality Review Organization (Behavioral Health Concepts, Inc.); LCL = 95% Lower Confidence Limit; UCL = 95% Upper Confidence Limit. Rate Validated by EQRO = Administrative Hits Validated by EQRO / Eligible Population. Estimated Bias = Rate Reported by MCO (DST) - Rate Validated by EQRO. Positive bias indicates an overestimate.

Source: MC+ Managed Care Organization HEDIS 2006 Data Submission Tools (DST).

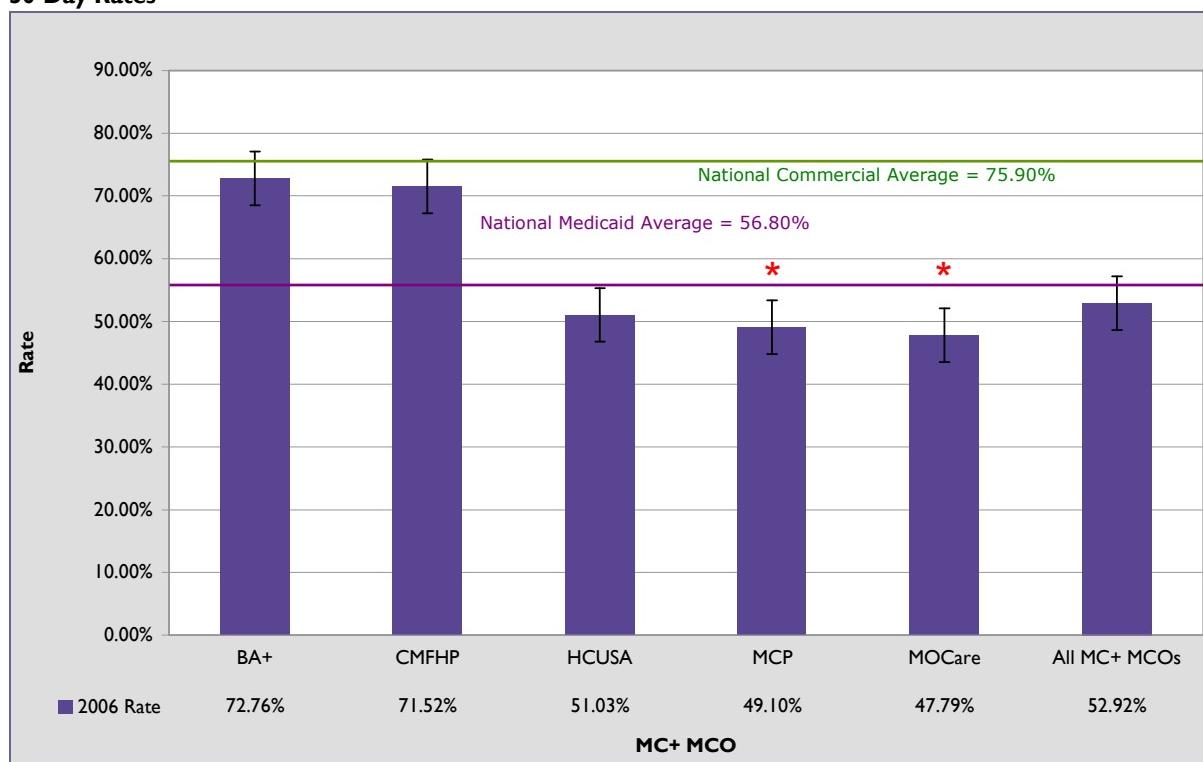
**Figure 16 - MC+ Managed Care Program HEDIS 2006 Follow-up After Hospitalization for Mental Illness, 7-Day Rates**



Note: Error bars on the y-axis represent 95% confidence intervals; \* Indicates values are significant at the 95% level of significance, two-tailed z-test.

Sources: MC+ MCO HEDIS 2006 Data Submission Tool (DST); National Committee for Quality Assurance (NCQA).

**Figure 17 - MC+ Managed Care Program HEDIS 2006 Follow-up After Hospitalization for Mental Illness, 30-Day Rates**



**Note:** Error bars on the y-axis represent 95% confidence intervals; \* Indicates values are significant at the 95% level of significance, two-tailed z-test.

Sources: MC+ MCO HEDIS 2006 Data Submission Tool (DST); National Committee for Quality Assurance (NCQA).

Table 40 shows the validation of numerators based on the review of numerator extract files and the medical record review. Item 13.2 was not applicable to the HEDIS 2005 Follow-up After Hospitalization for Mental Illness measure. Items 13.8 through 13.13 relate to the Hybrid Method of calculation and were not applicable to the measure. Item 13.6 did not apply, as none of the MC+ MCOs used non-standard codes. Across all MC+ MCOs, 100% of the criteria for calculating numerators were met. Each of the MC+ MCOs Met 100.0% of criteria for the calculation of the numerator.

**Table 40 - Numerator Validation Findings, HEDIS 2006 Follow-up After Hospitalization for Mental Illness Measure**

Item	Audit Elements	MC+ MCO					All MC+ MCOs				
		BA+	CMFHP	HCUSA	MCP	MOCare	Number Met	Number Partially Met	Number Not Met	Number Applicable	Rate Met
13.1	The MCO/PIHP has used the appropriate data, including linked data from separate data sets, to identify the entire at-risk population.	2	2	2	2	2	5	0	0	5	100.0%
13.2	The MCO/PIHP has in place and utilizes procedures to capture data for those performance indicators that could be easily under-reported due to the availability of services outside the MCO/PIHP.	NA	NA	NA	NA	NA	0	0	0	0	NA
13.3	The MCO's/PIHP's use of codes used to identify medical events are complete, accurate, and specific in correctly describing what has transpired and when.	2	2	2	2	2	5	0	0	5	100.0%
13.4	The MCO/PIHP correctly evaluated medical event codes when classifying members for inclusion or exclusion in the numerator.	2	2	2	2	2	5	0	0	5	100.0%
13.5	The MCO/PIHP has avoided or eliminated all double-counted members or numerator events.	2	2	2	2	2	5	0	0	5	100.0%
13.6	Any non-standard codes used in determining the numerator have been mapped to a standard coding scheme in a manner that is consistent, complete, and reproducible as evidenced by a review of the programming logic or a demonstration of the program.	NA	NA	NA	NA	NA	0	0	0	0	NA
13.7	Any time parameters required by the specifications of the performance measure are adhered to (i.e., that the measured event occurred during the time period specified or defined in the performance measure).	2	2	2	2	2	5	0	0	5	100.0%
13.8	Medical record reviews and abstractions have been carried out in a manner that facilitates the collection of complete, accurate, and valid data.	NA	NA	NA	NA	NA	0	0	0	0	NA
13.9	Record review staff have been properly trained and supervised for the task.	NA	NA	NA	NA	NA	0	0	0	0	NA
13.10	Record abstraction tools require the appropriate notation that the measured event occurred.	NA	NA	NA	NA	NA	0	0	0	0	NA
13.11	Record abstraction tools require notation of the results or findings of the measured event (if applicable).	NA	NA	NA	NA	NA	0	0	0	0	NA
13.12	Data included in the record extract files are consistent with data found in the medical records as evidenced by a review of a sample of medical record for applicable performance measures. (From Medical Record Review Validation Tools-Table 5, ATTACHMENT XII)	NA	NA	NA	NA	NA	0	0	0	0	NA
13.13	The process of integrating administrative data and medical record data for the purpose of determining the numerator is consistent and valid.	NA	NA	NA	NA	NA	0	0	0	0	NA
	Number Met	5	5	5	5	5	25	0	0	25	100.0%
	Number Partially Met	0	0	0	0	0					
	Number Not Met	0	0	0	0	0					
	Number Applicable	5	5	5	5	5					
	Rate Met	100.0%	100.0%	100.0%	100.0%	100.0%					

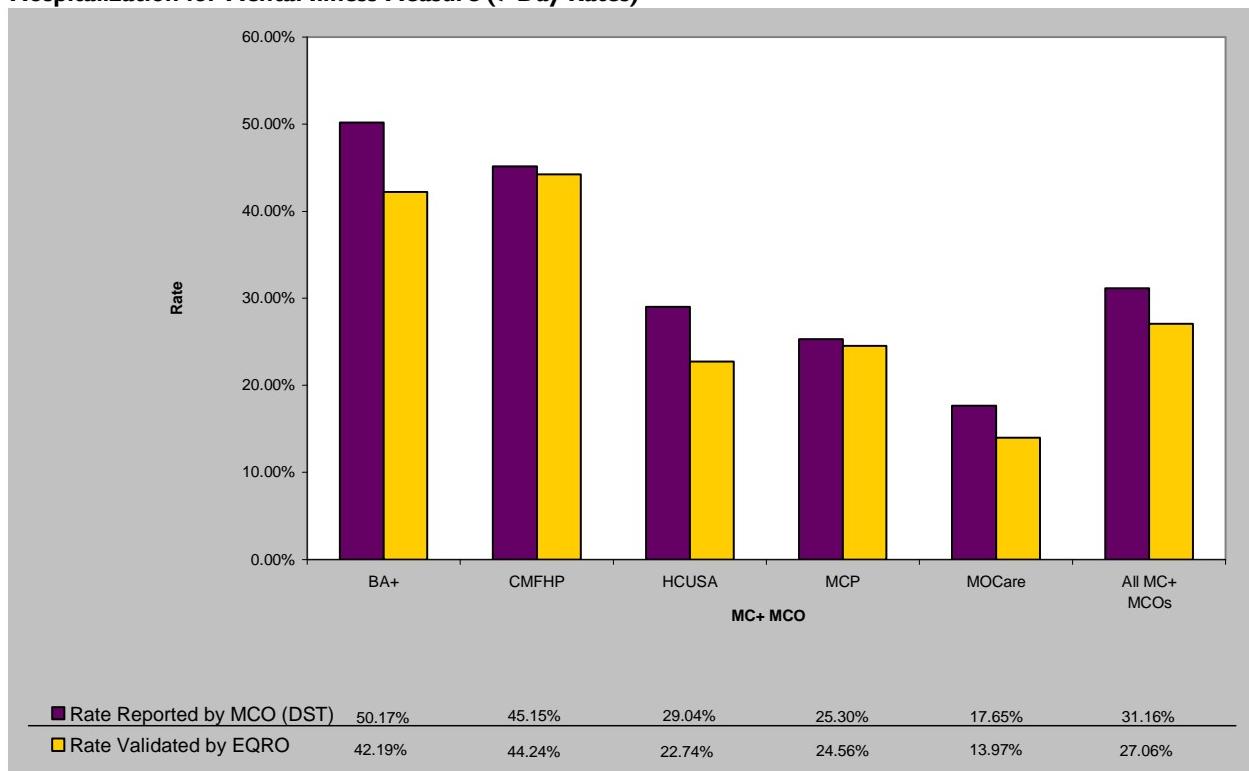
Note: A = Administrative; H = Hybrid; NA = Not Applicable to the method employed by the MC+ MCO; Administrative Method was used by the MC+ MCO and the item relates to the Hybrid Method; 2 = Met and validated through HEDIS software certification process and proper explanation in documentation or proper explanation in documentation. I = Partially Met; 0 = Not Met, validated through HEDIS software certification process, but no proper explanation of the process in documentation or no or insufficient explanation in documentation.

Source: BHC, Inc. 2006 External Quality Review Performance Measure Validation

## Submission of Measures to the State

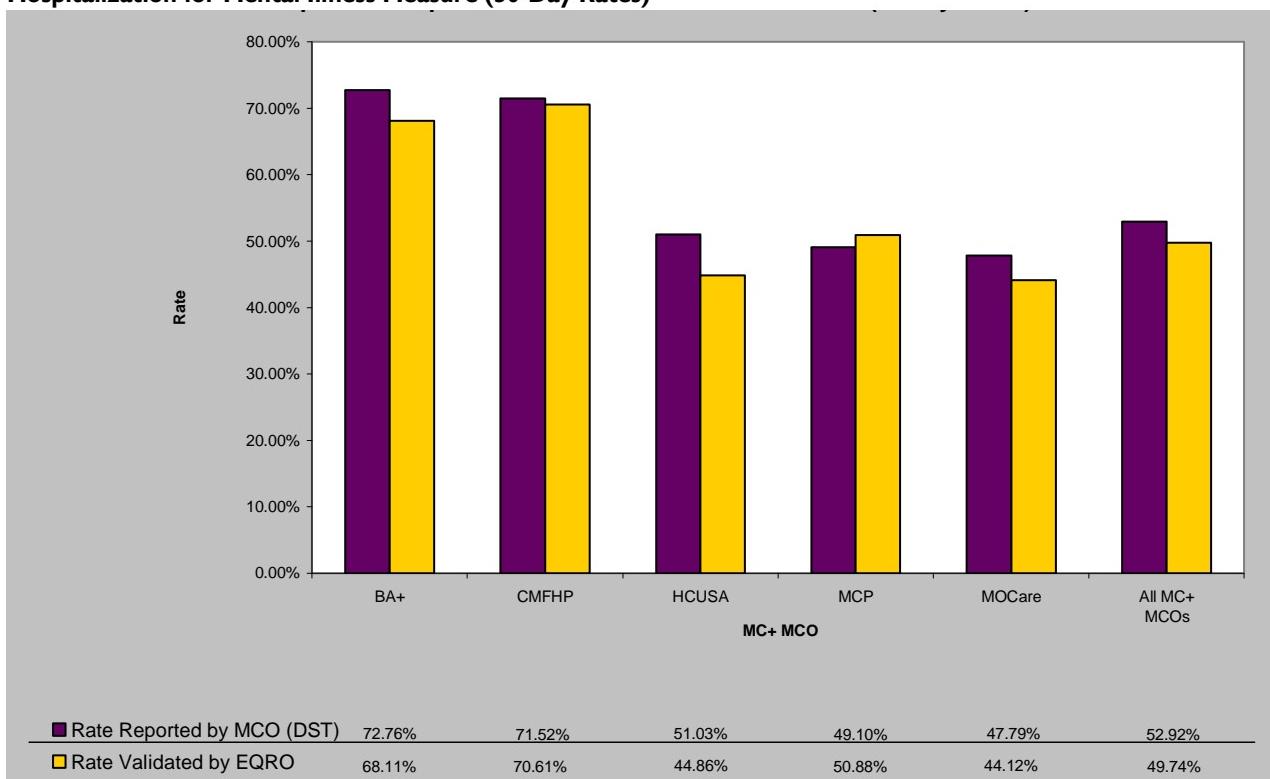
Reports from the SPHA were obtained regarding the submission of the HEDIS 2006 Follow-up After Hospitalization for Mental Illness Measure. All MC+ MCOs calculated and submitted the measure to the SPHA and SMA. The 7-Day rate reported by MC+ MCOs ranged from 17.65% (Missouri Care) to 50.17% (Blue Advantage Plus of Kansas City). The rate of all MC+ MCOs calculated based on data validated by the EQRO was 27.06%. The MC+ MCOs reported an overall rate of 31.16%, a 4.10% overestimate (see Figure 18). The 30-Day rate reported by MC+ MCOs ranged from 47.79% (Missouri Care) to 71.52% (Children's Mercy Family Health Partners). The rate of all MC+ MCOs calculated based on data validated by the EQRO was 49.74%. The rate reported by MC+ MCOs was 52.92%, a 3.18% overestimate (see Figure 19).

**Figure 18 - Rates Reported by MC+ MCOs and Validated by EQRO, HEIDS 2006 Follow-up After Hospitalization for Mental Illness Measure (7-Day Rates)**



Sources: MC+ MCO HEDIS 2005 Data Submission Tool (DST); BHC, Inc., 2006 External Quality Review Performance Measure Validation.

**Figure 19 - Rates Reported by MC+ MCOs and Validated by EQRO, HEIDS 2006 Follow-up After Hospitalization for Mental Illness Measure (30-Day Rates)**



Sources: MC+ MCO HEDIS 2005 Data Submission Tool (DST); BHC, Inc., 2006 External Quality Review Performance Measure Validation.

## Final Validation Findings

Tables 41 through 43 provide summaries of ratings across all Protocol CMS Protocol Validating Performance Measures Attachments for each MC+ MCO and measure validated. The rate of compliance with the calculation of the Prenatal and Postpartum Care measure specifications ranged from 93.1% (Mercy CarePlus) to 100% (Blue Advantage Plus of Kansas City, Children's Mercy Family Health Partners, HealthCare USA, and Missouri Care), with a rate of 98.6% across all MC+ MCOs and items. For the calculation of the Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life measure, MC+ MCO compliance with specifications ranged from 71.4% (Mercy CarePlus) to 100.0% (Blue Advantage Plus of Kansas City, Children's Mercy Family Health Partners, HealthCare USA, and Missouri Care), with a rate of 93.1% across all MC+ MCOs and items. For the rate of compliance with specifications for the calculation of the Follow-up After Hospitalization for Mental Illness measure, the rate ranged from 93.1% (Mercy CarePlus) to 100.0% (Blue Advantage Plus of Kansas City, Children's Mercy Family Health Partners, HealthCare USA, and Missouri Care), with an average of 98.9% across all MC+ MCOs.

**Table 41 - Summary of Attachment Ratings, HEDIS 2006 Prenatal and Postpartum Care Measure**

All Audit Elements	All MC+ MCOs					All MC+ MCOs
	BA+	CMFHP	HCUSA	MCP	MOCare	
Number Met	29	29	29	27	29	<b>143</b>
Number Partially Met	0	0	0	0	0	<b>0</b>
Number Not Met	0	0	0	2	0	<b>2</b>
Number Applicable	29	29	29	29	29	<b>145</b>
Rate Met	100%	100%	100%	93.1%	100%	<b>98.6%</b>

Note: Rate Met = Number Met / Number Applicable.

Source: BHC, Inc. 2006 External Quality Review Performance Measure Validation.

**Table 42 - Summary of Attachment Ratings, HEDIS 2006 Well-Child Visits in the 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> Years of Life Measure**

All Audit Elements	All MC+ MCOs					All MC+ MCOs
	BA+	CMFHP	HCUSA	MCP	MOCare	
Number Met	28	49	28	35	49	<b>189</b>
Number Partially Met	0	0	0	0	0	<b>0</b>
Number Not Met	0	0	0	14	0	<b>14</b>
Number Applicable	28	49	28	49	49	<b>203</b>
Rate Met	100%	100%	100%	71.4%	100%	<b>93.1%</b>

Note: Rate Met = Number Met / Number Applicable.

Source: BHC, Inc. 2006 External Quality Review Performance Measure Validation.

**Table 43 - Summary of Attachment Ratings, HEDIS 2006 Follow-up After Hospitalization for Mental Illness Measure**

All Audit Elements	All MC+ MCOs					All MC+ MCOs
	BA+	CMFHP	HCUSA	MCP	MOCare	
Number Met	29	48	29	27	48	<b>181</b>
Number Partially Met	0	0	0	0	0	<b>0</b>
Number Not Met	0	0	0	2	0	<b>2</b>
Number Applicable	29	48	29	29	48	<b>183</b>
Rate Met	100%	100.0%	100%	93.1%	100.0%	<b>98.9%</b>

Note: Rate Met = Number Met / Number Applicable.

Source: BHC, Inc. 2006 External Quality Review Performance Measure Validation.



Table 44 summarizes the final audit ratings for each of the performance measures and MC+ MCOs. The final audit findings for each of the measures was based on the evaluation of processes for calculating and reporting the measures, medical record review validation findings, and MC+ MCO extract files from repositories. The ratings were based on the impact of medical record review findings and the degree of overestimation of the rate as validated by the EQRO. The calculation of measures was considered invalid if the specifications were not properly followed, or if the rate validated by the EQRO fell outside the confidence intervals for the measure reported by the MC+ MCOs on the DST.

**Table 44 - Summary of EQRO Final Audit Ratings, HEDIS 2006 Performance Measures**

<b>MC+ MCO</b>	<b>Prenatal and Postpartum Care</b>	<b>Well-Child Visits in the 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> Years of Life</b>	<b>Follow-up After Hospitalization for Mental Illness</b>
Blue Advantage Plus of Kansas City	Fully Compliant	Fully Compliant	Substantially Compliant
Children's Mercy Family Health Partners	Substantially Compliant	Not Valid	Substantially Compliant
HealthCare USA	Fully Compliant	Substantially Compliant	Substantially Compliant
Mercy CarePlus	Not Valid	Fully Compliant	Substantially Compliant
Missouri Care	Fully Compliant	Substantially Compliant	Substantially Compliant

Note: Not Valid = Measure deviated from State (SMA and SPHA) specifications such that the reported rate was significantly biased. This designation is also assigned to measures for which data provided to the EQRO could not be independently validated. Significantly biased was defined by the EQRO as being outside the 95% confidence interval of the rate reported by the MC+ MCO on the HEDIS 2006 Data Submission Tool; Substantially Compliant = Measure was substantially compliant with State (SMA and SPHA) specifications and had only minor deviations that did not significantly bias the reported rate; Fully Compliant = Measure was fully compliant with State (SMA and SPHA) specifications. Data from Health Care USA was aggregated across all three regions of operation to provide MCO to MCO comparisons.

Source: BHC Inc., 2006 External Quality Review Performance Measure Validation.

For the HEDIS 2006 Prenatal and Postpartum Care measure, three of the five MC+ MCOs (Blue Advantage Plus of Kansas City, HealthCare USA, and Missouri Care) were Fully Compliant with the measure specifications. The rates validated by the EQRO for Mercy CarePlus were outside the range of the confidence intervals reported by the MCO. This difference in rate calculations is likely due to the 0.0% of medical record hits able to be validated by the EQRO.

Two MC+ MCOs were Fully Compliant with the specifications for calculating the HEDIS 2006 Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life measure. One MC+ MCO (Children's Mercy Family Health Partners) was rated as Not Valid, as the rate validated by the EQRO fell outside the confidence intervals reported by the MCO. The EQRO was not able to validate all of the MCO's medical record hits reported by CMFHP, and this is the likely reason for the differences in the rate.

All five MC+ MCOs were Substantially Compliant with the specifications for calculating the HEDIS 2006 Follow-Up After Hospitalization for Mental Illness measure.

## 3.5 Conclusions

In calculating the measures, MC+ MCOs have adequate management information systems for capturing and storing enrollment, eligibility, and claims information for the calculation of the three HEDIS 2006 measures validated.

Among MC+ MCOs, there was good documentation of the HEDIS 2006 rate production process.

The rates of medical record submission for the two measures utilizing the Hybrid Methodology were excellent, all MC+ MCOs submitted 95% to 100% of the records requested.

### QUALITY OF CARE

The HEDIS 2006 Follow-Up After Hospitalization for Mental Illness measure is categorized as an Effectiveness of Care measure and is designed to measure the effectiveness/quality of care received by health plan members.

All five MC+ MCOs were substantially compliant with the specifications for calculation of this measure. Two MC+ MCOs reported rates that were higher than the National Medicaid Average for this measure.

### ACCESS TO CARE

The HEDIS 2006 Prenatal and Postpartum Care measure is categorized as an Access/Availability of Care measure and is designed to measure the level of access that health plan members receive to prenatal and postpartum care.

Three of the five MC+ MCOs were fully compliant with the specifications for calculation of this measure. One MC+ MCO reported a rate that was higher than the National Medicaid Average for this measure.

The HEDIS 2006 Prenatal and Postpartum Care measure was unable to be validated for one of the five MC+ MCOs and does not represent a valid measure of performance for the MC+ Managed Care Program.

### TIMELINESS OF CARE

The HEDIS 2006 Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life measure is categorized as an Use of Services measure and is designated to measure the timeliness of the care received.

Two of the five MC+ MCOs were fully compliant with the specifications for calculation of this measure. Two MC+ MCOs reported rates that were higher than the National Medicaid Average and the National Commercial Average for this measure.



The HEDIS 2006 Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life measure was unable to be validated for one of the five MC+ MCOs and does not represent a valid measure of performance for the MC+ Managed Care Program.

## RECOMMENDATIONS

1. For the calculation of the HEDIS Prenatal and Postpartum Care measure, the Hybrid Method should be required by the SMA to facilitate accurate and valid MC+ MCO comparisons and a valid statewide rate for comparison of performance with other states.
2. The SMA should encourage technical assistance regarding the calculation of HEDIS performance measures and medical record review processes for the calculation of performance measures.
3. The SMA should re-validate measures for which all MC+ MCOs were not Fully or Substantially Compliant on the calculation of measures and in order to determine the impact on contract performance.
4. MC+ MCOs with significantly lower rates of eligible members and administrative hits should closely examine the potential reasons for fewer members or claims identified. This may be due to member characteristics, but is more likely due to claims administration procedures and system characteristics such as the proportion of members receiving services from capitated providers. Identifying methods of improving administrative hits will improve the accuracy in calculating the measures.
5. The SMA should consider having the EQRO validate the calculation of at least one measure from year to year, for comparison and analysis of trend data.
6. MC+ MCOs should run query reports early enough in the HEDIS season so that they may effectuate change in rates where interventions could easily be implored.



## 4.0 VALIDATION OF ENCOUNTER DATA

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**Performance Management Solutions Group**

A division of Behavioral Health Concepts, Inc.

## 4.1 Definition

“For the purposes of this protocol, an encounter refers to the electronic record of a service provided to an MCO enrollee by both institutional and practitioner providers (regardless of how the provider was paid) when the service would traditionally be a billable service under Fee-for-Service (FFS) reimbursement systems.”<sup>12</sup>

An encounter is the unit of service provided to a Member by the MCO. Encounter data provides the same type of information found on a claim form. It does not substitute for medical record documentation, but should be consistent with and supported by medical record documentation (e.g. date of procedure, type of procedure). The MC+ MCOs’ contract with the State Medicaid Agency (SMA; Missouri Department of Social Services, Division of Medical Services; DMS) details the requirements for an acceptable submission of an encounter. The SMA’s requirements for encounter data submitted by the MC+ MCOs include the type of encounter data and required data fields.

## 4.2 Purpose and Objectives

*“Encounter data can be used to assess and improve quality, as well as monitor program integrity and determine capitation payment rates. However, in order for encounter data to effectively serve these purposes, it must be valid; i.e., complete and accurate... This protocol specifies processes for assessing the completeness and accuracy of encounter data submitted by MCOs and PIHPs to the State. It also can assist in the improvement of the processes associated with the collection and submission of encounter data to State Medicaid agencies.”<sup>13</sup>*

Three objectives for the encounter validation were identified. They included: assessing the quality of data for required fields for each claim type; evaluating the representativeness (or completeness) of the SMA encounter claims database for MC+ MCO paid and unpaid claims; and validating medical records against the SMA encounter claims database. The following were the objectives and associated evaluation questions.

<sup>12</sup> Department of Health and Human Services. Centers for Medicare and Medicaid Services (2002). Validating Encounter Data: A protocol for use in Conducting Medicaid External Quality Review Activities, Final Protocol, Version 1.0, May 1, 2002. Washington, D.C.: Author.

<sup>13</sup> Ibid.

1. The first objective was to obtain a quality baseline of the SMA encounter claim database (completeness, accuracy, and reasonableness). The alternative hypothesis was that all data fields in the SMA encounter claims database consist of valid (complete, accurate, and reasonable) encounter claim data. Appendix 6 shows the recommended minimum criteria established for completeness and accuracy of specific data fields. Several evaluation questions were addressed:
  - What is the baseline level of completeness, accuracy, and reasonableness of the critical fields?
  - What is the level of volume and consistency of services?
  - What are the data quality issues associated with the processing of encounter data?
  - What problems are there with how files are compiled and submitted by the MCO?
  - What types of encounter claim data are missing and why?
2. The second objective was to examine the match between MC+ MCO claims (paid and unpaid) and the SMA encounter paid claims database. This would facilitate identification of the level of completeness of the SMA encounter claims database as represented by MC+ MCOs paid claims. The alternative hypotheses were that 100% of MC+ MCO paid claims are represented in the SMA encounter claims database, and 0.00% of MC+ MCO unpaid claims are represented in the SMA encounter claims database. Several evaluation questions were posed:
  - What types of paid encounter data are missing and why?
  - What is the fault/match rate of paid and unpaid encounter claims in the SMA encounter claim database and the MC+ MCO claims database?
  - What services are being provided that are not being paid?
  - How many services are being provided that are not being paid?
3. The third objective was to validate the SMA encounter claims (paid) database against medical record documentation and obtain a baseline fault (error) rate for the level of accuracy of the SMA encounter claims database relative to the services delivered by MC+ MCO providers. The alternative hypothesis was that there is a 100% match between the encounter claim data in the medical record and the data in the SMA encounter claims database. Accuracy or match rates of 70% or greater are anticipated for new Medicaid managed care organizations<sup>14</sup>. Several evaluation questions were addressed:
  - To what extent do the claims in the SMA encounter claims database reflect the information documented in the medical record?
  - What is the fault/match rate between SMA encounter claims and medical records?
  - What types of errors are noted?

<sup>14</sup> Medstat (1999). A Guide for States to Assist in the Collection and Analysis of Medicaid Managed Care Data: Second Edition.

## 4.3 Technical Methods

### TIME FRAME

The dates of service from July 1, 2006 through September 30, 2006 were selected by the SMA for the three encounter data validation objectives.

### PROCEDURES FOR DATA COLLECTION

For the first objective, the SMA encounter claims extract file was used to examine the completeness, accuracy, and reasonableness of the critical fields and to calculate the rate of each claim type per 1,000 members by MC+ MCOs. There are six claim types described in the SMA Health Plan Layout Manual: I = Inpatient claim type; M = Medical claim type; O = Outpatient Hospital claim type; D = Dental claim type; H = Home Health claim type; and P = Pharmacy claim type. Inpatient, Outpatient and Home Health claim types are submitted using a Universal Billing (UB-92) file layout, Medical and Dental claim types are submitted using a National Standard Format/Centers for Medicare and Medicaid Services 1500 (NSF/CMS 1500) file layout, and the Pharmacy claims are submitted using the National Council for Prescription Drug Programs, version 3 file layout (NCPDP v.3.0). All claims are sent from the MC+ MCOs to the SMA through the SMA claims vendor, InfoCrossing, and claim types are assigned by the Medicaid Management Information System (MMIS).

After review and approval of the technical methods and objectives by the SMA, the EQRO reviewed, discussed with the SMA, and submitted a data request (see Appendix 7) for the SMA encounter claims extract file to be validated for each claim type and each MC+ MCO. The file request was made to the SMA on November 13, 2006 and received on January 15, 2007 by the EQRO. The SMA reviewed and approved the data request and parameters for the designated fields to be validated by the EQRO.

For the second objective of comparing the SMA encounter claims with MC+ MCOs' paid and unpaid claims, the SMA encounter claims extract file was parsed by type of file layout (NSF/CMS 1500, UB-92, or NCPDP v.3.0) in preparation for matching against MC+ MCO paid and unpaid claims. A cross-walk for matching MMIS field names with those of the three national standards file layouts was developed and submitted to the SMA for review (February 8, 2005) and approval (March 29, 2005). MC+ MCOs were requested to provide paid and unpaid claims for the designated period on the sample of members selected by the EQRO. While last year only two MC+ MCOs supplied the

appropriate information required, thus limiting our analyses to those two MC+ MCOs, this year all plans did submit the requested information.

The number of Medical encounter claims in the SMA encounter claims extract file was used for sample size estimation for the third objective and analysis of the evaluation questions. To examine the degree of match between the SMA encounter claims database and medical record procedures and diagnoses, 100 encounters from each MC+ MCO were randomly selected from Medical claim types for the period of July 1, 2006 through September 30, 2006 for medical record review. Appendices 8-10 contain letters of request to providers for medical records, the Table of Contents for the Medical Record Review Training Manual, and copies of medical record review tools. Several challenges in requesting the data were addressed.

## ANALYSES

To assess the accuracy and completeness of the SMA encounter claims database, the SMA encounter claims extract file for all MC+ MCO paid encounter claims representing services rendered from July 1, 2006 through September 30, 2006 was analyzed for completeness, accuracy, and reasonableness (validity) of the data in each “critical”, or required field examined. The Inpatient, Medical, Dental, Home Health, Outpatient Hospital, Pharmacy, and critical fields were chosen by the SMA for analysis, with an established threshold of 100% for completion, accuracy, and validity:



**Medical (NSF/CMS 1500) Claim Type**

Outpatient Claim Type  
 Recipient ID  
 First Date of Service  
 Last Date of Service  
 Place of Service  
 Units of Service  
 Procedure Code  
 Inpatient Diagnosis (five diagnosis fields)

**Dental (NSF/CMS 1500) Claim Type**

Outpatient Claim Type  
 Recipient ID  
 First Date of Service  
 Last Date of Service  
 Units of Service  
 Procedure Code

**Home Health (UB-92) Claim Type**

Outpatient Claim Type  
 Recipient ID  
 First Date of Service  
 Last Date of Service  
 Units of Service  
 Procedure Code  
 Revenue Code  
 Inpatient Diagnosis (five diagnosis fields)

**Inpatient (UB-92) Claim Type**

Inpatient Claim Type  
 Recipient ID  
 Admission Type  
 Admission Date  
 Discharge Date  
 Bill Type  
 Patient Discharge Status  
 Inpatient Diagnosis (five diagnosis fields)  
 First Date of Billing  
 Last Date of Billing  
 Revenue Code  
 Units of Service

**Outpatient Hospital (UB-92) Claim Type**

Outpatient Claim Type  
 Recipient ID  
 First Date of Service  
 Last Date of Service  
 Place of Service  
 Units of Service  
 Procedure Code  
 Inpatient Diagnosis (five diagnosis fields)

**Pharmacy (NCPDP v.3.0)**

Recipient ID  
 Dispensing Date  
 Pharmacy Prescription Number  
 Drug Quantity Dispensed  
 Number of Days Supply  
 National Drug Code

Each field was examined for the presence or absence of data (completeness), the correct type and size of information (accuracy), and the presence of valid values (reasonableness) or validity using the criteria listed below.

<b>Completeness:</b>	The extent to which an encounter claim field contains data (either present or absent).
<b>Accuracy:</b>	The extent to which an encounter claim field contains the correct type of information (e.g., numeric, alpha, alphanumeric) in the proper format (e.g., mm/dd/yyyy for date field).
<b>Reasonableness (Validity):</b>	The extent to which an encounter claim field represents a valid value (e.g., an actual procedure code, actual birth date)

For the validation of the SMA encounter claims extract file with MC+ MCO medical records, the goal was to validate the procedure code and diagnosis code fields for Outpatient and Inpatient claim types and to validate drug quantity dispensed and drug name dispensed for the Pharmacy claim type in the SMA encounter claims database against the information provided in the medical record. The minimum number of records required for the evaluation of two variables (procedure and diagnosis

or quantity and name) with an estimated error rate of 30% (based on Medstat estimates<sup>15</sup>), reliability of 1.96 (95% statistical significance), and a meaningful difference of 55% were calculated using the number of Medical encounters in the SMA encounter claims file for each MC+ MCO (see Figure 20). There were no differences in the number of required records for MC+ MCOs, with the minimum required sample size of 88. A total of 100 encounters for each MC+ MCO were randomly selected for medical record review using a probability sample.

**Figure 20 - Formula for Calculating Minimum Required Sample Size**

$$n = \frac{z^2 N P_y (1 - P_y)}{(N - 1) \varepsilon^2 P_y 2 + z^2 P_y (1 - P_y)}$$

Where Py = Estimated True Error Rate; meaningful difference between true and estimated value ; z = level of reliability;  $\varepsilon = (\text{Py} - \text{meaningful difference})/\text{meaningful difference}$ ; N = number of Medicaid Claim Types for the period January 1, 2004-March 31, 2004; n = Minimum required sample size<sup>16</sup>

## 4.4 Findings

One limitation of the present analysis is that the encounter claim completeness and accuracy analysis was based on paid encounter claims and does not account for all claims that are submitted and rejected through system edits. Also, because the SMA encounter claims extract file was for service dates from July 1, 2006 through September 30, 2006, some service dates might extend beyond this period. For example, if the first date of service was later in the period (e.g., September 30, 2006), the last date of service may extend beyond the period specified by SMA parameters for the validation process (e.g., a Discharge Date of October 1, 2006). When last dates of service appeared to be within a reasonable period, dates outside the valid range were considered valid. In addition, the second through fifth diagnosis code fields are required when the information is available. Not all encounters had five diagnoses. Therefore, 100.00% completion of these fields would not be expected. Conclusions regarding the extent to which the encounter claims database reflects the accuracy and completeness of rejected claims cannot be drawn. Data are presented in the aggregate and include data for the MC+ MCO FirstGuard Healthplan. FirstGuard data is included in order to reflect an accurate picture of the amount of encounters delivered by all MC+ MCOs during the service dates July 1, 2006 through September 30, 2006. However, as of February 1, 2007, FirstGuard Healthplan was no longer a provider of MC+ Managed Care services in Missouri and the

<sup>15</sup> Medstat (1999). A Guide for States to Assist in the Collection and Analysis of Medicaid Managed Care Data: Second Edition.

<sup>16</sup> Levy, P.S. & Lemeshow, S. L. (1999). Sampling of Populations: Methods and Applications, Third Edition, John Wiley and Sons: New York; see box 3.5 for Exact and approximate sample sizes required under simple random sampling for proportions.

SMA made the decision not to require their response to any of the EQRO's data requests after that date. Thereby, the information contained in this aggregate section is available at the MC+ MCO level in the individual MC+ MCO summaries (excluding FirstGuard). The findings of the encounter data validation are presented in response to each evaluation question, by claim type and critical field for all MC+ MCOs.

### **What is the Baseline Level of Completeness, Accuracy, and Reasonableness of the Critical fields? What Types of Encounter Claim Data are Missing and Why?**

For the Medical claim type, there were a total of 811,852 encounter claims paid by the SMA for the period July 1, 2006 through September 30, 2006.

1. The Outpatient Claim Type field was 100.00% complete, accurate and valid.
2. The Outpatient Recipient ID field was 100.00% complete, accurate and valid.
3. The Outpatient First Date of Service field was 100.00% complete, accurate and valid.
4. The Outpatient Last Date of Service field was 100.00% complete, accurate and valid.
5. The Outpatient Units of Service field was 100.00% complete, accurate, and valid.
6. The Outpatient Procedure Code field was 100.00% complete, accurate, and valid.
7. The Outpatient Place of Service field was 100.00% complete, accurate and valid.
8. The first Diagnosis Code field was 99.999% complete, accurate and valid. The remaining fields were left blank (incomplete, inaccurate, and invalid).
9. Although the second through fifth Diagnosis Code fields are optional according to the Health Plan Record Layout Manual, they fell well below the 100% threshold established by the SMA for this validation. The second Diagnosis Code field was 30.09% complete, accurate and valid. The remaining fields were blank (incomplete, inaccurate, and invalid). The third Diagnosis Code field was 10.73% complete, accurate and valid (incomplete, inaccurate, and invalid). The remaining fields were blank (incomplete, inaccurate, and invalid). The fourth Diagnosis Code field was 4.86% complete, accurate and valid. The remaining fields were blank (incomplete, inaccurate, and invalid). The fifth Diagnosis Code field was 0.00% complete, accurate and valid. All fields were blank (incomplete, inaccurate, and invalid).

For the Dental claim type, there were 132,507 encounter claims paid by the SMA for the period July 1, 2006 through September 30, 2006. All critical fields examined were 100.00% complete, accurate and valid for all MC+ MCOs, except the first Diagnosis Code fields, which were blank for two of the six MC+ MCOs.

For the Home Health claim type, there were a total of 749 encounter claims paid by the SMA for the period July 1, 2006 through September 30, 2006.

1. The Outpatient Claim Type field was 100.00% complete, accurate and valid.
2. The Recipient ID field was 100.00% complete, accurate and valid.
3. The First Date of Service field was 100.00% complete, accurate and valid.
4. The Last Date of Service field was 100.00% complete, accurate and valid.
5. The Units of Service field was 100.00% complete, accurate and valid.
6. The Procedure Code field was 67.29% complete, accurate and valid (i.e., 245 fields left blank).

For the Inpatient claim type, there were a total of 87,404 encounter claims paid by the SMA for the period July 1, 2006 through September 30, 2006.

1. The Inpatient Claim Type field was 100.00% complete, accurate and valid.
2. The Recipient ID field was 100.00% complete, accurate and valid.
3. The Admission Type field was 100.00% complete, accurate, and valid.
4. The Admission Date field was 100.00% complete, accurate, and valid.
5. The Discharge Date field was 100.00% complete and 98.72% accurate and valid. Invalid entries of "99999999" were present in 1118 fields.
6. The Bill Type field was 100.00% complete, accurate and valid.
7. The Patient Status field was 100.00% complete, accurate and valid.
8. The first Diagnosis Code field was 100.00% complete, accurate and 99.95% valid. The remaining fields (n = 46) were blank (incomplete, inaccurate, and invalid).
9. The second, third, fourth, and fifth Diagnosis Code fields fell below the 100% threshold for completeness, accuracy, and validity established by the SMA (96.35%, 78.703%, 68.53%, and 53.50%, respectively). The remaining fields were blank (incomplete, inaccurate, and invalid).
10. The First Date of Service field was 100.00% complete, accurate and valid.
11. The Last Date of Service field was 100.00% complete, accurate and valid.
12. The Revenue Code field was 99.93% complete, accurate, and valid. The remaining fields (n=64) were blank (incomplete, inaccurate, and invalid).
13. The Units of Service field was 100.00% complete, accurate and valid.

For the Outpatient Hospital claim type, there were a total of 450,278 encounter claims paid by the SMA for the period July 1, 2006 through September 30, 2006.

1. The Outpatient Claim Type field was 100.00% complete, accurate and valid.
2. The Recipient ID field was 100.00% complete, accurate and valid.
3. The First Date of Service field was 100.00% complete and accurate, and valid.
4. The Last Date of Service field was 100.00% complete and accurate, and valid.
5. The Units of Service field was 100.00% complete, accurate and valid.
6. The Outpatient Procedure Code field was 98.96% complete and accurate. The remaining fields were blank (incomplete, inaccurate, and invalid). The fields were 71.18% valid. There were a small number of fields with procedure codes less than five alphanumeric characters. A large proportion of the invalid codes were outside the specified codes (i.e., 80048-89399) when the Revenue Code ranged 300-319.
7. The Outpatient Revenue Code field was 100.00% complete, accurate and valid.
8. The first Diagnosis Code field was 100.00% complete, accurate and valid.
9. Although the second through fifth Diagnosis Code fields are optional according to the Health Plan Record Layout Manual, they fell well below the 100% threshold established by the SMA for this validation. The second Diagnosis Code field was 77.53% complete, accurate and valid. The remaining fields were blank (incomplete, inaccurate, and invalid). The third Diagnosis Code field was 52.74% complete, accurate and valid (incomplete, inaccurate, and invalid). The remaining fields were blank (incomplete, inaccurate, and invalid). The fourth Diagnosis Code field was 28.60% complete, accurate and valid. The remaining fields were blank (incomplete, inaccurate, and invalid). The fifth Diagnosis Code field was 14.24% complete, accurate and valid. The remaining fields were blank (incomplete, inaccurate, and invalid).

For the Pharmacy claim type, there were 428,663 claims paid by the SMA for the period July 1, 2006 through September 30, 2006. All fields examined were 100.00% complete, accurate and valid (Recipient ID, First Date of Service, Prescription Number, Quantity Dispensed, Days Supply, and National Drug Code).

## What is the Level of Volume and Consistency of Services?

One method of examining the level, consistency, and volume of services is to assess the extent to which each MC+ MCO is consistent with the remaining MC+ MCOs and the average of all MC+ MCOs services represented in the SMA encounter claims database. The level, consistency, and volume of services represented in the SMA encounter claims database is a function of the acceptance of encounter claim submissions. It is also a function of the process of manipulation of data from national standard layouts for Medical (NSF/CMS 1500); Dental (NSF/CMS 1500); Inpatient, Outpatient Hospital, Home Health (UB-92); and Pharmacy claims (NCPDP 3.0) into the State MMIS system edits. Additionally, the entry and transmission of data by MC+ MCOs, vendors, and providers, the accessibility of services, member utilization patterns, and provider practice patterns influence the data. With the large number of members enrolled in each MC+ MCO, it was expected that factors such as physician practice patterns and member utilization patterns would not have a statistically significant impact on the findings, resulting in all MC+ MCOs having similar rates of encounters per 1,000 members as the rate for all MC+ MCOs. Statistically significant findings are more likely a function of the data quality and completeness resulting from the processing of data by providers, vendors, MC+ MCOs, and the MMIS rather than the accessibility or quality of services.

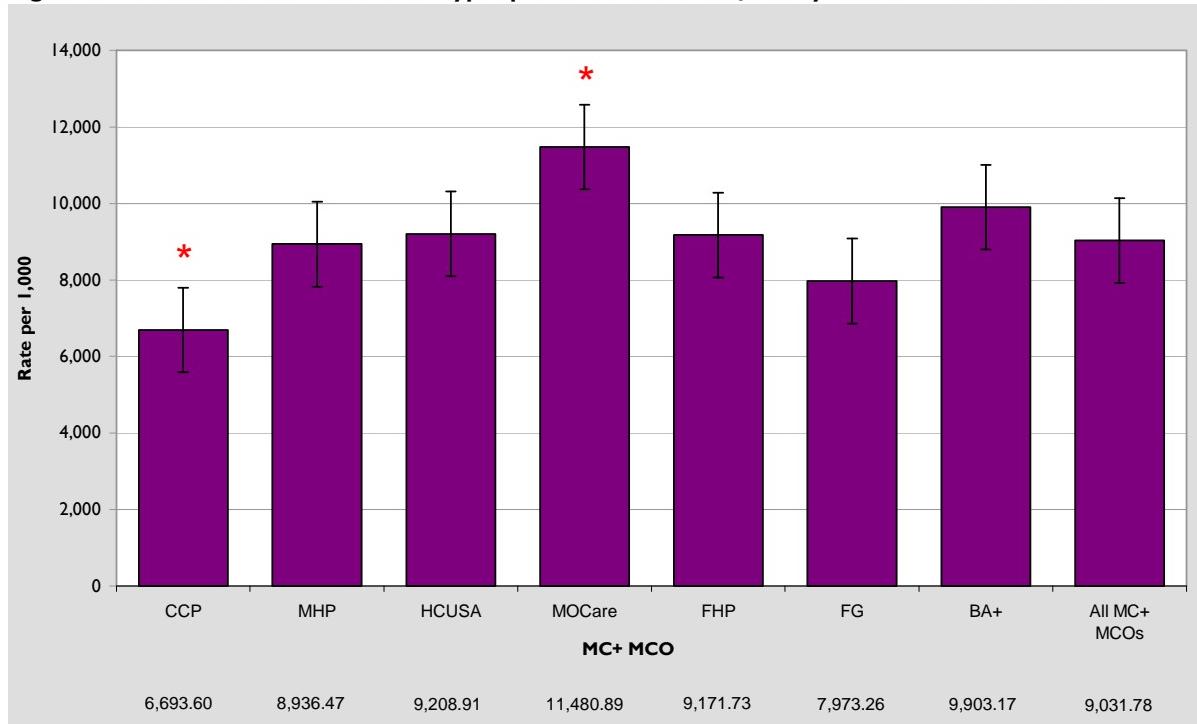
Another method of examining the level, consistency, and volume of services is to compare the baseline per 1,000 member encounter data collected during the 2005 EQRO audit to the data obtained during this audit. By comparing service levels received during the period January 1, 2005 – March 31, 2005 (the time period examined during the 2005 EQRO review) with the service levels reported during the time July 1, 2006 – September 30, 2006, we feel that a comparison of accessibility to services and member utilization patterns can be made.

Using the SMA encounter claims extract file from July 1, 2006 through September 30, 2006, the volume of services for each claim type and MC+ MCO was examined. The rate of each claim type, regardless of the accuracy, consistency, and validity of the data was examined. The rate of claims per 1,000 members based on one quarter of data was calculated by dividing the number of members enrolled as of the last week of September 2006, by 4, then calculating the rate of claims per 1,000 members. Figures 21 through 26 illustrate the rates of claim types and the results of two-tailed z-tests comparing each MC+ MCO with the statewide rate of claims. Statistically significant differences between an MC+ MCO and the rate for all MC+ MCOs at the 95% level of statistical significance are indicated by an asterisk. The 95% upper and lower confidence limits are

represented by the black bars on the y-axis. For comparisons that were statistically significant at the 95% confidence interval (CI), the z-score (z), the upper and lower confidence intervals (CI), and the significance levels ( $p < .05$ ) are reported. When there was no statistical significance, the significance level is reported as “not significant” (n.s.).

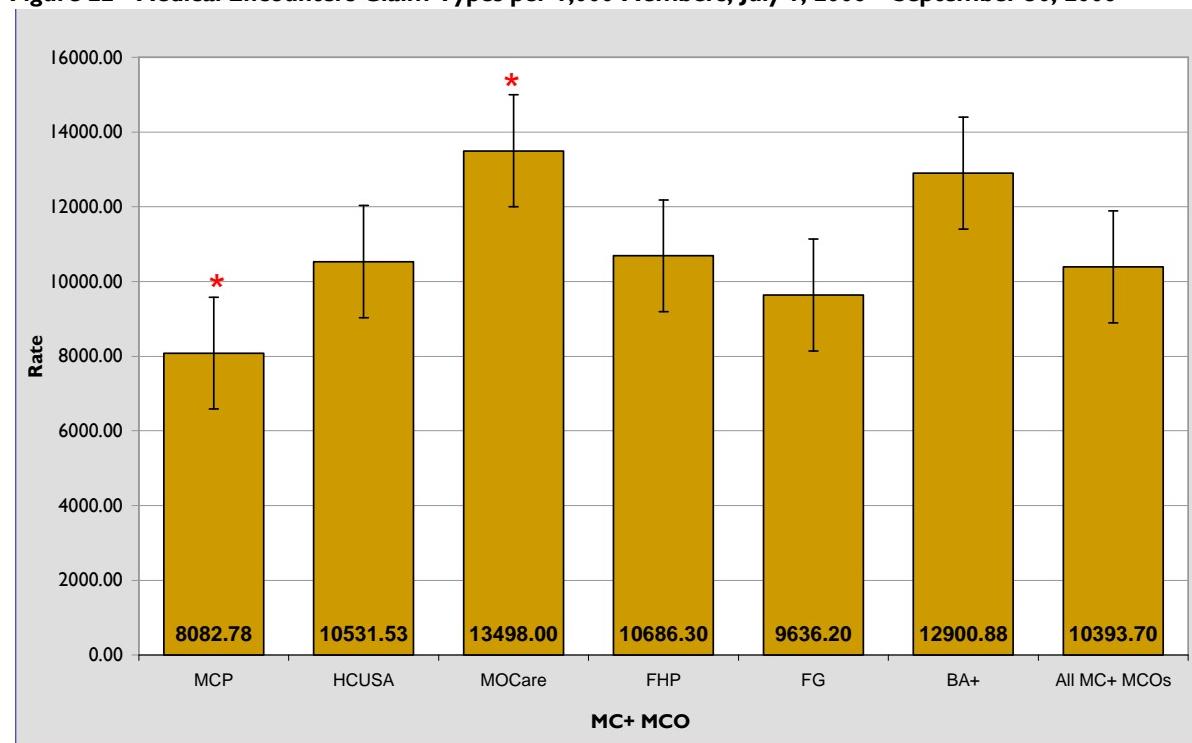
Medical encounter claim types consist of claims submitted by providers, vendors, and MC+ MCOs. The results for the 2005 EQR audit were very similar to those reported in 2006. In 2005, the rate for all MC+ MCOs was (9,031.78 Medical encounter claims per 1,000 members), see Figure 21. Also, in 2005, Missouri showed a significantly higher rate, while one Community CarePlus (now MercyCare Plus) had a significantly lower rate of Medical encounter claims than the rate for all MC+ MCOs.

As shown in Figure 22, there was some variability across MC+ MCOs in the statewide rate per 1,000 members of Medical encounter claim types compared to the rate for all MC+ MCOs (10,399.70 Medical encounter claims per 1,000 members). One MC+MCO (Missouri Care, 13498.00,  $z = 1.29$ ; 95% CI: 11999.15, 14996.85;  $p < .01$ ) showed a significantly higher rate, while one MC+ MCO (MercyCare Plus 8082.78,  $z = -1.39$ ; 95% CI: 6583.93, 9581.63;  $p < .01$ ) had a significantly lower rate of Medical Encounter claims than the rate for all MC+ MCOs.

**Figure 21 - Medical Encounters Claim Types per 1,000 Members, January 1, 2005 – March 31, 2005**

**Note:** Rate per 1,000 members is an estimated annual rate based on first quarter state encounter data; Rate per 1,000 members = Number Claims January 1-2005 – March 31, 2005 / (Number members / 4) X 1,000. Enrollment as of the last week of March 2005 was used to calculate the rate per 1,000 members. Error bars on the y-axis represent 95% confidence intervals; \* Indicates values are significant at the 95% level of significance, two-tailed z-test.

**Source:** Missouri Department of Social Services, Division of Medical Services, State Session MPRI screen, enrollment for all Waivers.

**Figure 22 - Medical Encounters Claim Types per 1,000 Members, July 1, 2006 – September 30, 2006**

Note: Rate per 1,000 members is an estimated annual rate based on first quarter state encounter data; Rate per 1,000 members = Number Claims July 1-2006 – September 30, 2006 / (Number members / 4) X 1,000. Enrollment as of the last week of September 2006 was used to calculate the rate per 1,000 members. Error bars on the y-axis represent 95% confidence intervals; \* Indicates values are significant at the 95% level of significance, two-tailed z-test.

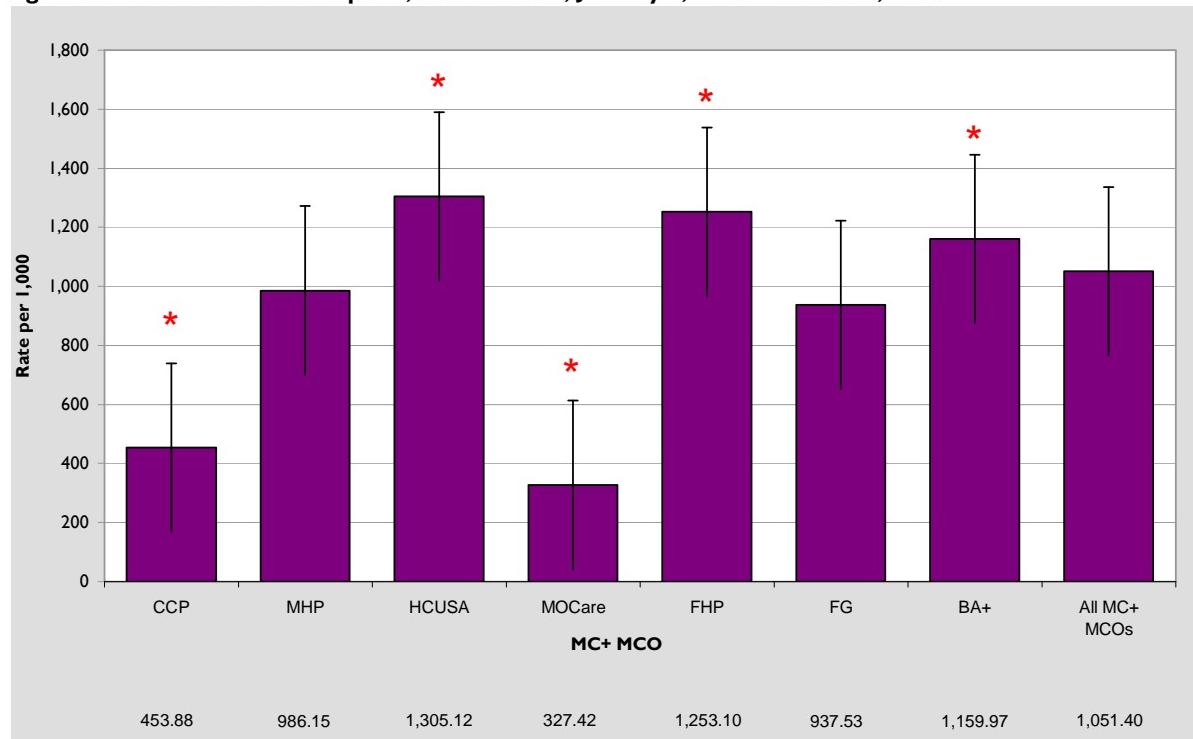
Source: Missouri Department of Social Services, Division of Medical Services , State Session MPRI screen, enrollment for all Waivers.

Dental encounter claims consist of claims submitted by providers, vendors, and MC+ MCOs. In 2005, there was a higher rate of Dental encounter claims (1696.42 Dental encounter claims per 1,000 members), see Figure 23. Two MC+ MCOs (HealthCare USA, 1305.12,  $z = 1.01$ ; 95% CI: 1019.81, 1590.42;  $p < .05$ ; and Family Health Partners, 1305.12,  $z = .87$ ; 95% CI: 967.80, 1538.40;  $p < .05$ ) had significantly higher rates. While two MC+ MCOs (Community CarePlus, 453.88,  $z = -1.20$ ; 95% CI: 168.58, 739.19;  $p < .05$ ; and Missouri Care, 327.42,  $z = -1.53$ ; 95% CI: 42.12, 612.72;  $p < .05$ ) had significantly lower rates of Dental encounter claims per 1,000 members than the rate for all MC+ MCOs.

As shown in Figure 24, there was some variability across MC+ MCOs in the rate per 1,000 members of Dental encounter claims compared to the rate for all MC+ MCOs (1118.99 Dental encounter claims per 1,000 members) submitted in 2006. Two MC+ MCOs (Children's Mercy Family Health Partners, 2000.49,  $z = 1.20$ ; 95% CI: 1820.97, 2180.01;  $p < .05$ ) and (Missouri Care,

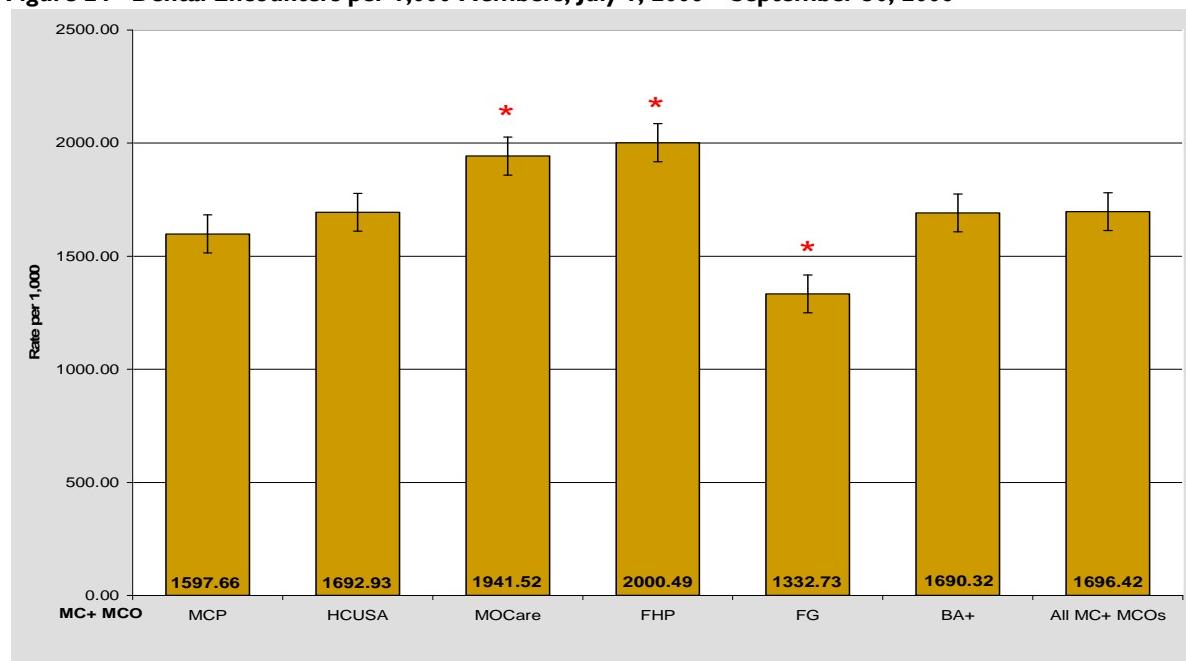
1941.52,  $z = 0.96$ ; 95% CI: 1762.00, 2121.04;  $p < .05$ ) had significantly higher rates than the average for all MC+ MCOs. While one MC+ MCO (FirstGuard, 1332.73,  $z = -1.55$ ; 95% CI: 1153.21, 1512.25;  $p < .05$ ) had significantly lower rates of Dental encounter claims per 1,000 members than the rate for all MC+ MCOs.

**Figure 23 - Dental Encounters per 1,000 Members, January 1, 2005 – March 31, 2005**



Note: Rate per 1,000 members is an estimated annual rate based on first quarter state encounter data; Rate per 1,000 members = Number Claims January 1-2005 – March 31, 2005 / (Number members / 4) X 1,000. Enrollment as of the last week of March 2005 was used to calculate the rate per 1,000 members. Error bars on the y-axis represent 95% confidence intervals; \* Indicates values are significant at the 95% level of significance, two-tailed z-test.

Source: Missouri Department of Social Services, Division of Medical Services, State Session MPRI screen, enrollment for all Waivers.

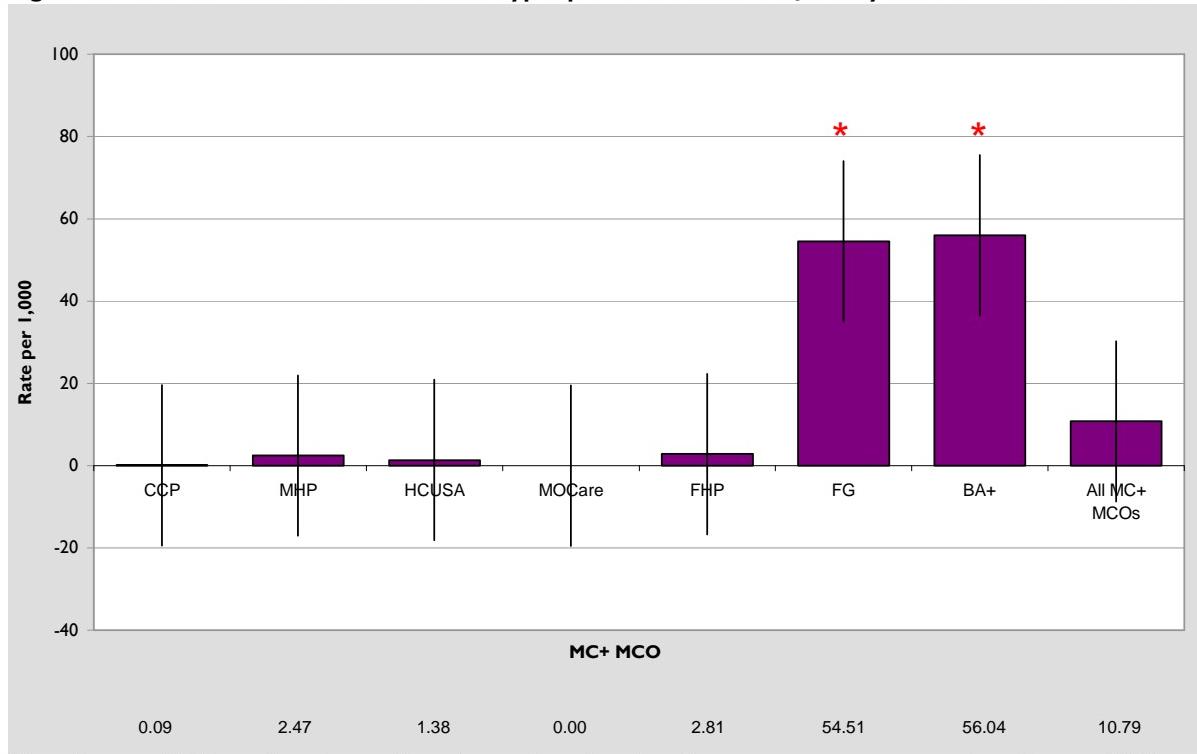
**Figure 24 - Dental Encounters per 1,000 Members, July 1, 2006 – September 30, 2006**

**Note:** Rate per 1,000 members is an estimated annual rate based on first quarter state encounter data; Rate per 1,000 members = Number Claims July 1-2006 – September 30, 2006 / (Number members / 4) X 1,000. Enrollment as of the last week of September 2006 was used to calculate the rate per 1,000 members. Error bars on the y-axis represent 95% confidence intervals; \* Indicates values are significant at the 95% level of significance, two-tailed z-test.

Source: Missouri Department of Social Services, Division of Medical Services , State Session MPRI screen, enrollment for all Waivers.

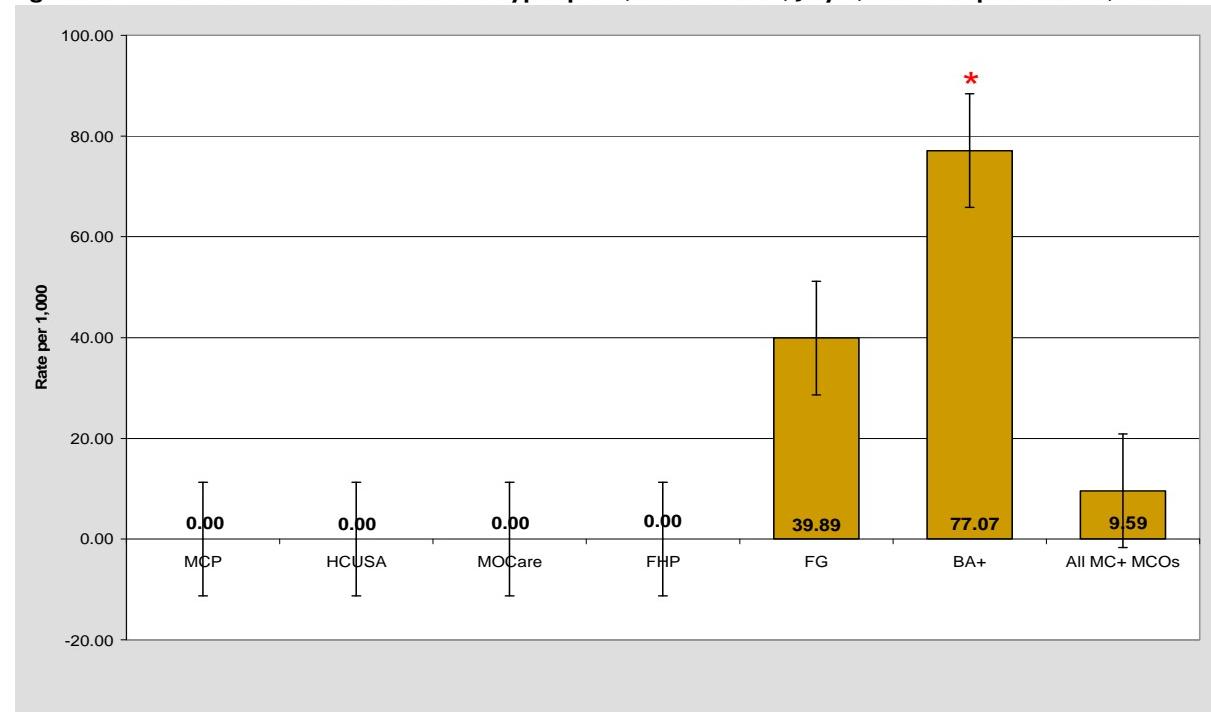
In 2005, the same two MC+ MCOs (FirstGuard, 54.51,  $z = 1.43$ ; 95% CI: 35.00, 74.03;  $p < .01$  and Blue-Advantage Plus of Kansas City, 56.04,  $z = 1.49$ ; 95% CI: 36.53, 75.55;  $p < .01$ ) submitted significantly higher rates of Home Health encounter claims than the rate for all MC+ MCOs (10.79 Home Health encounter claims per 1,000 members - see Figure 25).

In 2006, there were very few Home Health encounter claim types submitted by MC+ MCOs. Only two of the six MC+ MCOs submitted Home Health encounters, see Figure 26. Therefore, those two health plans (FirstGuard, 39.89,  $z = 0.63$ ; 95% CI: 15.88, 63.90;  $p < .05$  and Blue Advantage Plus of Kansas City, 77.07,  $z = 1.78$ ; 95% CI: 53.06, 101.08;  $p < .05$ ) submitted significantly higher rates of Home Health encounter claims than the rate for all MC+ MCOs (9.59 Home Health encounter claims per 1,000 members) .

**Figure 25 - Home Health Encounter Claim Types per 1,000 Members, January 1, 2005 – March 31, 2005**

**Note:** Rate per 1,000 members is an estimated annual rate based on first quarter state encounter data; Rate per 1,000 members = Number Claims January 1-2005 – March 31, 2005 / (Number members / 4) X 1,000. Enrollment as of the last week of March 2005 was used to calculate the rate per 1,000 members. Error bars on the y-axis represent 95% confidence intervals; \* Indicates values are significant at the 95% level of significance, two-tailed z-test.

Source: Missouri Department of Social Services, Division of Medical Services, State Session MPRI screen, enrollment for all Waivers.

**Figure 26 - Home Health Encounter Claim Types per 1,000 Members, July 1, 2006 – September 30, 2006**

Note: Rate per 1,000 members is an estimated annual rate based on first quarter state encounter data; Rate per 1,000 members = Number Claims July 1-2006 – September 30, 2006 / (Number members / 4) X 1,000. Enrollment as of the last week of September 2006 was used to calculate the rate per 1,000 members. Error bars on the y-axis represent 95% confidence intervals; \* Indicates values are significant at the 95% level of significance, two-tailed z-test.

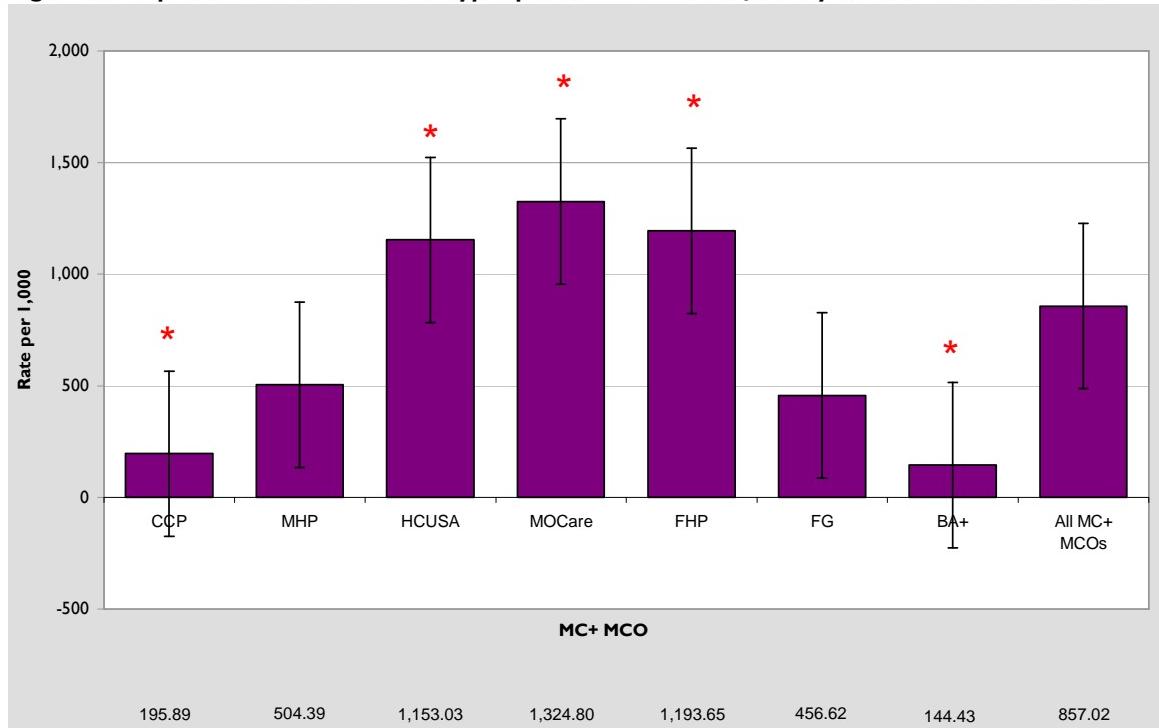
Source: Missouri Department of Social Services, Division of Medical Services , State Session MPRI screen, enrollment for all Waivers.

As shown in Figure 27, in 2005, the EQRO found that three MC+ MCOs had significantly higher rates of Inpatient encounter claims (Health Care USA, 1153.03,  $z = .89$ ; 95% CI: 782.77, 1523.29,  $p < .05$ ; Missouri Care, 1324.80,  $z = 1.23$ ; 95% CI: 954.54, 1695.06;  $p < .05$ ; Family Health Partners, 1193.65,  $z = .97$ ; 95% CI: 823.39, 1563.91;  $p < .05$ ). Two MC+ MCOs had significantly lower rates of Inpatient encounter claims (Community CarePlus, 195.89,  $z = -1.03$ ; 95% CI: 0, 566.15;  $p < .01$ ; Blue-Advantage Plus of Kansas City, 144.43,  $z = -1.32$ ; 95% CI: 0, 514.69;  $p < .01$ ) than the rate for all MC+ MCOs.

Inpatient encounter claim types consist of claims submitted by hospital facilities and MC+ MCOs. As shown in Figure 28, there was some variability across MC+ MCOs in the rate per 1,000 members of Inpatient encounter claims compared to the rate for all MC+ MCOs (1118.99 Inpatient encounter claims per 1,000 members). One MC+ MCO had significantly higher rates of Inpatient encounter claims (Missouri Care, 1933.40,  $z = 1.25$ ; 95% CI: 1411.47, 2455.33,  $p < .01$ ). Two MC+

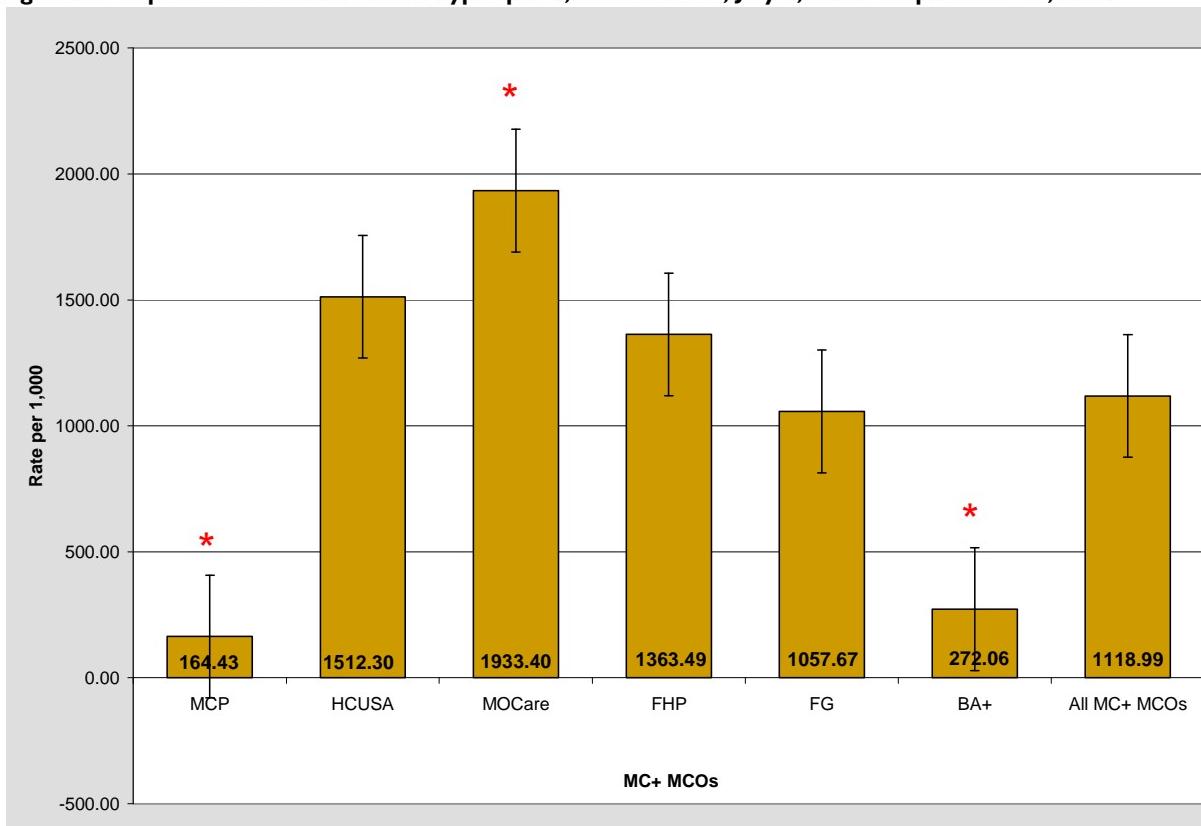
MCOs had significantly lower rates of Inpatient encounter claims (MercyCare Plus, 164.43,  $z = -1.26$ ; 95% CI: -357.50, 686.36;  $p < .01$ ; Blue-Advantage Plus of Kansas City, 272.06,  $z = -1.11$ ; 95% CI: -249.87, 793.99;  $p < .01$ ) than the rate for all MC+ MCOs.

**Figure 27 - Inpatient Encounter Claim Types per 1,000 Members, January 1, 2005 – March 31, 2005**



**Note:** Rate per 1,000 members is an estimated annual rate based on first quarter state encounter data; Rate per 1,000 members = Number Claims January 1-2005 – March 31, 2005 / (Number members / 4) X 1,000. Enrollment as of the last week of March 2005 was used to calculate the rate per 1,000 members. Error bars on the y-axis represent 95% confidence intervals; \* Indicates values are significant at the 95% level of significance, two-tailed z-test.

**Source:** Missouri Department of Social Services, Division of Medical Services, State Session MPRI screen, enrollment for all Waivers.

**Figure 28 - Inpatient Encounter Claim Types per 1,000 Members, July 1, 2006 – September 30, 2006**

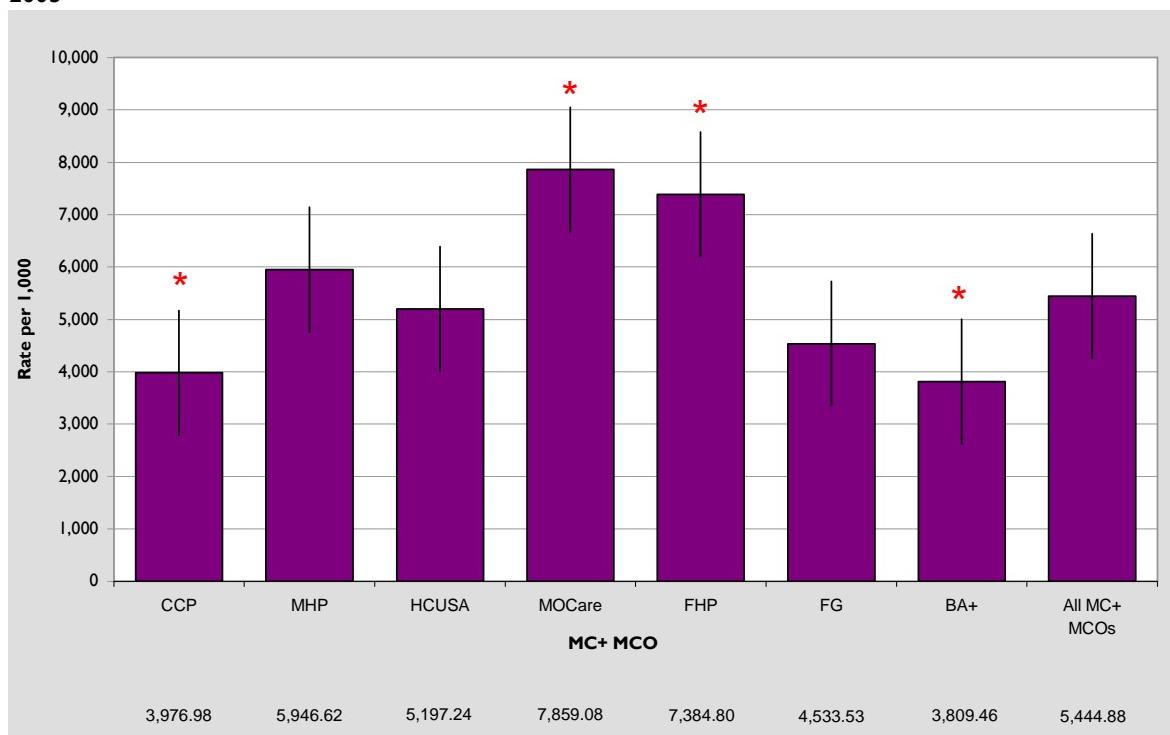
Note: Rate per 1,000 members is an estimated annual rate based on first quarter state encounter data; Rate per 1,000 members = Number Claims July 1–September 30, 2006 / (Number members / 4) X 1,000. Enrollment as of the last week of September 2006 was used to calculate the rate per 1,000 members. Error bars on the y-axis represent 95% confidence intervals; \* Indicates values are significant at the 95% level of significance, two-tailed z-test.

Source: Missouri Department of Social Services, Division of Medical Services, State Session MPRI screen, enrollment for all Waivers.

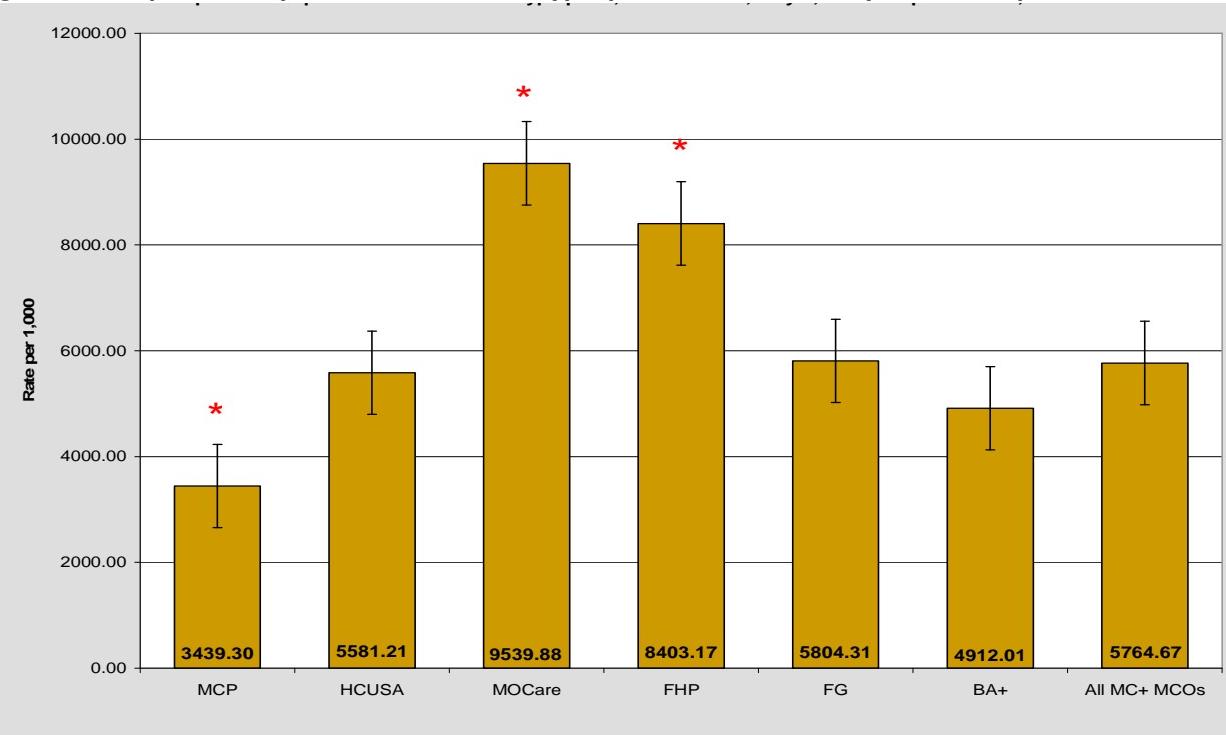
Outpatient Hospital encounter claim types consist of claims submitted by outpatient hospital facilities and MC+ MCOs. In 2005, the EQRO found that the rate of Outpatient Hospital encounter claims per 1,000 members for all MC+ MCOs was 5,444.88, see Figure 29. The EQRO found that two MC+ MCOs had significantly higher rates of Inpatient encounter claims (Missouri Care, 7859.08,  $z = 1.44$ ; 95% CI: 6667.85, 9050.32;  $p < .01$ ; Family Health Partners, 7384.80,  $z = 1.15$ ; 95% CI: 6193.57, 8576.04;  $p < .01$ ). While two MC+ MCOs had significantly lower rates of Outpatient Hospital encounter claims per 1,000 members (Community CarePlus, 3976.98,  $z = -.97$ ; 95% CI: 2785.75, 5168.21;  $p < .05$ ; and Blue-Advantage Plus of Kansas City, 3809.46,  $z = -1.07$ ; 95% CI: 2618.23, 5000.76;  $p < .05$ ) than the rate for all MC+ MCOs.

As shown in Figure 30, in 2006, there was some variability across MC+ MCOs compared to the rate for all MC+ MCOs (5,764.67 Outpatient Hospital encounter claims per 1,000 members). Two MC+ MCOs had significantly higher rates of Inpatient encounter claims (Missouri Care, 9539.88,  $z = 1.44$ ; 95% CI: 7857.40, 11222.36;  $p < .05$ ; Family Health Partners, 8403.17,  $z = 0.93$ ; 95% CI: 6720.69, 10085.65;  $p < .05$ ). While one MC+ MCO had significantly lower rates of Outpatient Hospital encounter claims per 1,000 members (MercyCare Plus, 3439.30,  $z = -1.25$ ; 95% CI: 1756.82, 5121.78;  $p < .05$ ) than the rate for all MC+ MCOs.

**Figure 29 - Outpatient Hospital Encounter Claim Types per 1,000 Members, January 1, 2005 – March 31, 2005**



**Note:** Rate per 1,000 members is an estimated annual rate based on first quarter state encounter data; Rate per 1,000 members = Number Claims January 1-2005 – March 31, 2005 / (Number members / 4) X 1,000. Enrollment as of the last week of March 2005 was used to calculate the rate per 1,000 members. Error bars on the y-axis represent 95% confidence intervals; \* Indicates values are significant at the 95% level of significance, two-tailed z-test. Source: Missouri Department of Social Services, Division of Medical Services, State Session MPRI screen, enrollment for all Waivers.

**Figure 30 - Outpatient Hospital Encounter Claim Types per 1,000 Members, July 1, 2006 – Sept. 30, 2006**

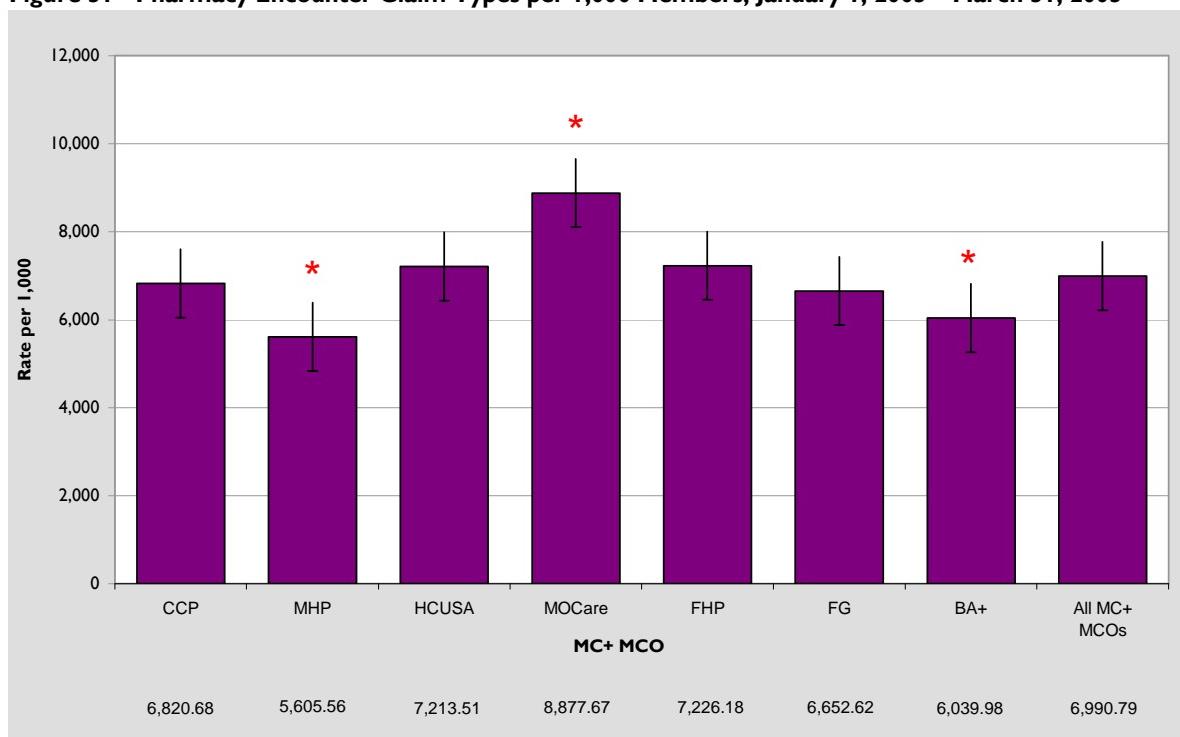
Note: Rate per 1,000 members is an estimated annual rate based on first quarter state encounter data; Rate per 1,000 members = Number Claims July 1, 2006 – September 30, 2006 / (Number members / 4) X 1,000. Enrollment as of the last week of September 2006 was used to calculate the rate per 1,000 members. Error bars on the y-axis represent 95% confidence intervals; \* Indicates values are significant at the 95% level of significance, two-tailed z-test. Source: Missouri Department of Social Services, Division of Medical Services , State Session MPRI screen, enrollment for all Waivers.

Pharmacy encounter claim types consist of claims submitted by pharmacy providers and MC+ MCOs. In 2005, one MC+ MCO (Missouri Care, 8877.67,  $z = 1.87$ , 95% CI: 8100.94, 9654.40;  $p < .05$ ) had a significantly higher rate of Pharmacy encounter claims, see Figure 31. While two MC+ MCOs (Mercy Health Plan, 5605.56,  $z = -1.25$ ; 95% CI: 4828.48, 6382.29;  $p < .01$ ; and Blue-Advantage Plus of Kansas City, 6039.98,  $z = -.84$ ; 95% CI: 5263.25, 6816.71;  $p < .05$ ) had a significantly lower rate of Pharmacy encounter claims per 1,000 members than the rate for all MC+ MCOs.

As shown in Figure 32, there was little variability across MC+ MCOs in the statewide rate per 1,000 members of Pharmacy encounter claims compared to the rate for all MC+ MCOs (5487.94 Pharmacy encounter claims per 1,000 members). In this category, one MC+ MCO (MercyCare Plus, 3749.62;  $z = -1.73$ ; 95% CI: 2717.34, 4781.90;  $p < .05$ ) had a significantly lower rate of Pharmacy encounter claims. The other four MC+ MCOs had a rate consistent with the rate for all

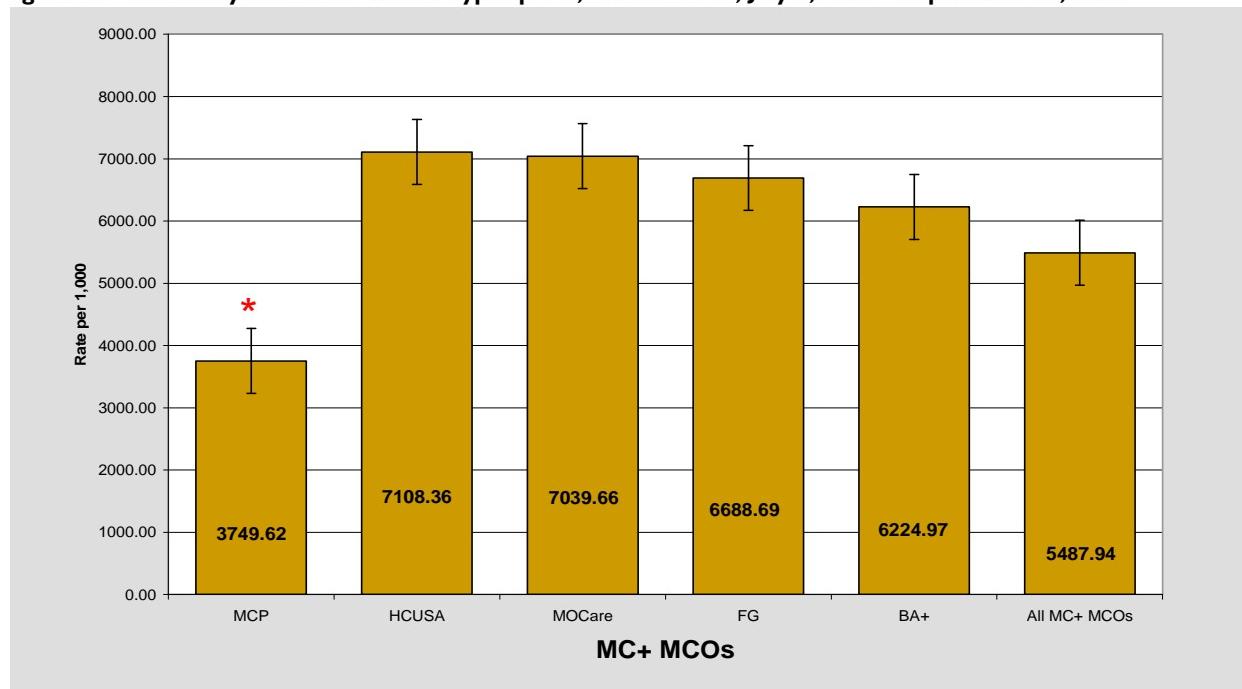
MC+ MCOs. This is direct contrast with the 2005 report, which revealed a great deal of variability across MC+ MCOs. Another difference from the 2005 report is that the “all MC+ MCO” rate does not include pharmacy encounters for the MC+ MCO, Children’s Mercy Family Health Partners, this is due to the fact that CMFHP “carved – out” pharmacy encounters from their contract with the SMA beginning on July 1, 2006.

**Figure 31 - Pharmacy Encounter Claim Types per 1,000 Members, January 1, 2005 – March 31, 2005**



**Note:** Rate per 1,000 members is an estimated annual rate based on first quarter state encounter data; Rate per 1,000 members = Number Claims January 1-2005 – March 31, 2005 / (Number members / 4) X 1,000. Enrollment as of the last week of March 2005 was used to calculate the rate per 1,000 members. Error bars on the y-axis represent 95% confidence intervals; \* Indicates values are significant at the 95% level of significance, two-tailed z-test.

**Source:** Missouri Department of Social Services, Division of Medical Services, State Session MPRI screen, enrollment for all Waivers.

**Figure 32 - Pharmacy Encounter Claim Types per 1,000 Members, July 1, 2006 – September 30, 2006**

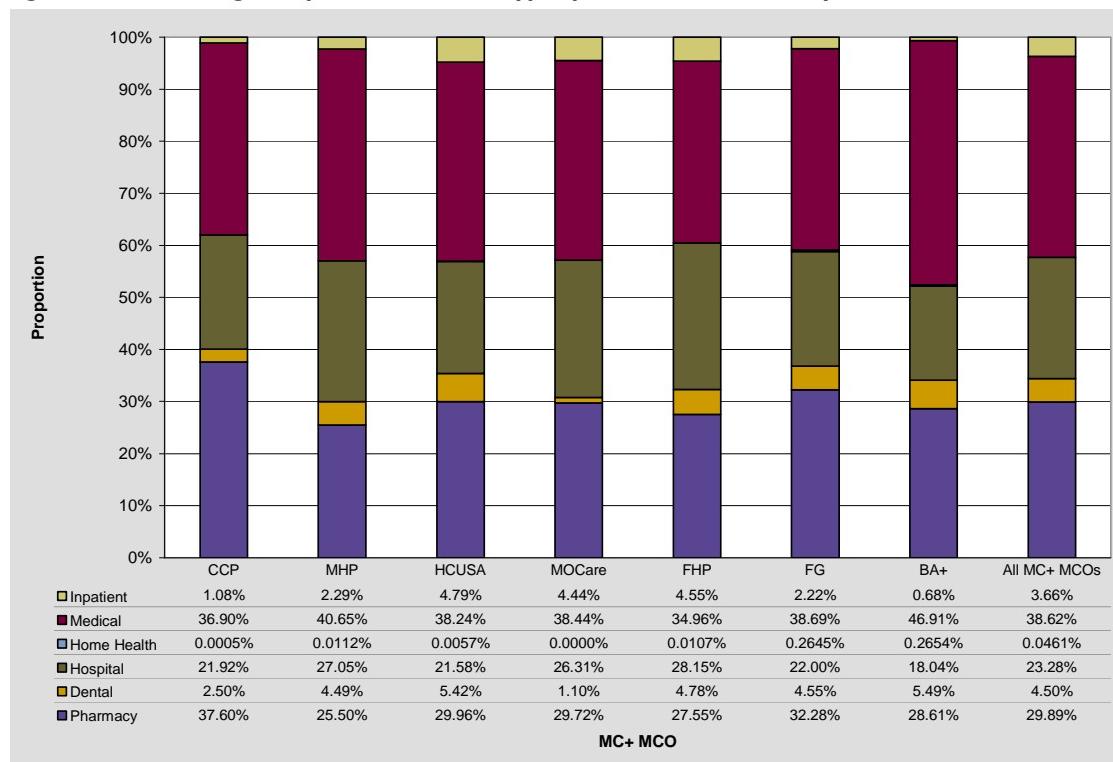
Note: Rate per 1,000 members is an estimated annual rate based on first quarter state encounter data; Rate per 1,000 members = Number Claims July 1, 2006 – September 30, 2006 / (Number members / 4) X 1,000. Enrollment as of the last week of September 2006 was used to calculate the rate per 1,000 members. Error bars on the y-axis represent 95% confidence intervals; \* Indicates values are significant at the 95% level of significance, two-tailed z-test.

Source: Missouri Department of Social Services, Division of Medical Services , State Session MPRI screen, enrollment for all Waivers.

Table 46 and Figure 34 show the proportion of claim types for each MC+ MCO based on the SMA encounter claims extract file. HealthCare USA had the highest proportion of Pharmacy claims relative to all other MC+ MCOs; Children's Mercy Family Health Partners had the highest proportion of the Dental claim types; Blue Advantage Plus of Kansas City had the highest proportion of Home Health claim types; and Missouri Care had the highest proportion of Medical, hospital and Inpatient claims. There were no patterns observed across MC+ Plans, suggesting that the variations are not related to member or provider practice characteristics.

**Table 45 - Numerical Proportion of Claim Types per MC+ MCO, January 1, 2005 –March 31, 2005**

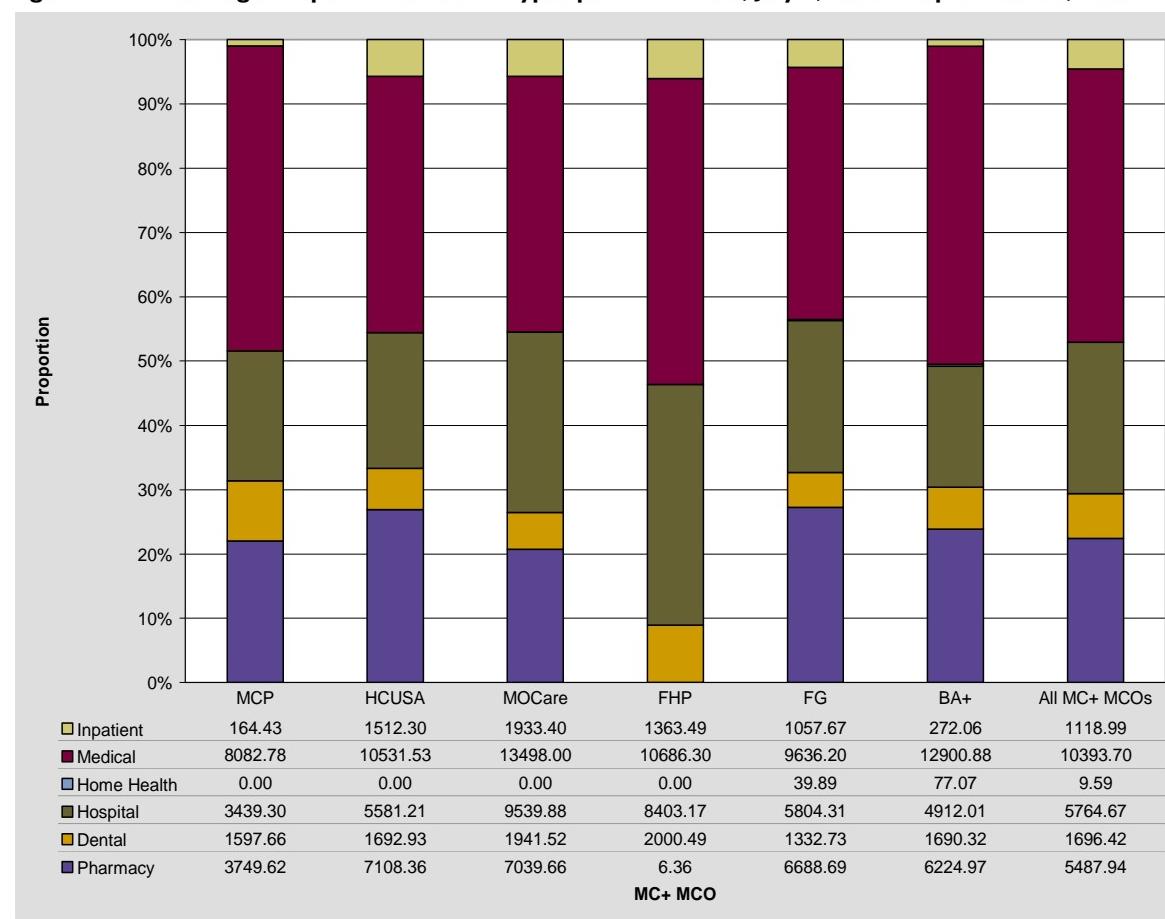
<b>MC+ MCO</b>	<b>Medical</b>	<b>Dental</b>	<b>Home Health</b>	<b>Hospital</b>	<b>Inpatient</b>	<b>Pharmacy</b>
<b>CCP</b>	6693.60	453.88	0.09	3976.98	195.89	6820.68
<b>MHP</b>	8936.47	986.15	2.47	5946.62	504.39	5605.56
<b>HCUSA</b>	9208.91	1305.12	1.38	5197.24	1153.03	7213.51
<b>MOCare</b>	11480.89	327.42	0.00	7859.08	1324.80	8877.67
<b>FHP</b>	9171.73	1253.10	2.81	7384.80	1193.65	7226.18
<b>FG</b>	7973.26	937.53	54.51	4533.53	456.62	6652.62
<b>BA+</b>	9903.17	1159.97	56.04	3809.46	144.43	6039.98
<b>All MC+ MCOs</b>	<b>9031.78</b>	<b>1051.40</b>	<b>10.79</b>	<b>5444.88</b>	<b>857.02</b>	<b>6990.79</b>

**Figure 33 - Percentage Proportion of Claim Types per MC+ MCO, January 1, 2005 –March 31, 2005**

Source: Missouri Department of Social Services, Division of Medical Services encounter claims extract file, 2006

**Table 46 - Numerical Proportion of Claim Types per MC+ MCO, July 1, 2006 – September 30, 2006**

<b>MC+ MCO</b>	<b>Medical</b>	<b>Dental</b>	<b>Inpatient</b>	<b>Home Health</b>	<b>Hospital</b>	<b>Pharmacy</b>
<b>MCP</b>	8082.78	1597.66	164.43	0.00	3439.30	3749.62
<b>HCUSA</b>	10531.53	1692.93	1512.30	0.00	5581.21	7108.36
<b>MOCare</b>	13498.00	1941.52	1933.40	0.00	9539.88	7039.66
<b>FHP</b>	10686.30	2000.49	1363.49	0.00	8403.17	0.00
<b>FG</b>	9636.20	1332.73	1057.67	39.89	5804.31	6688.69
<b>BA+</b>	12900.88	1690.32	272.06	77.07	4912.01	6224.97
<b>All MC+ MC</b>	<b>10393.70</b>	1696.42	1118.99	9.59	5764.67	5487.94

**Figure 34 - Percentage Proportion of Claim Types per MC+ MCO, July 1, 2006 – September 30, 2006**

Source: Missouri Department of Social Services, Division of Medical Services encounter claims extract file, February 15, 2007.

**Table 47 – Fee-for-Service, Rate per 1,000 Members all Encounter Claims**

<b>Claim Type</b>	<b>Number of Claims</b>	<b>Total Members</b>	<b>Claims Per 1,000 Members</b>
Home Health	1,313	393,170	3.34
Dental	43,523	393,170	110.70
Medical	658,473	393,170	1,674.78
Outpatient	399,120	393,170	1,015.13
Drug	765,866	393,170	1,947.93
Inpatient	15,021	393,170	38.20

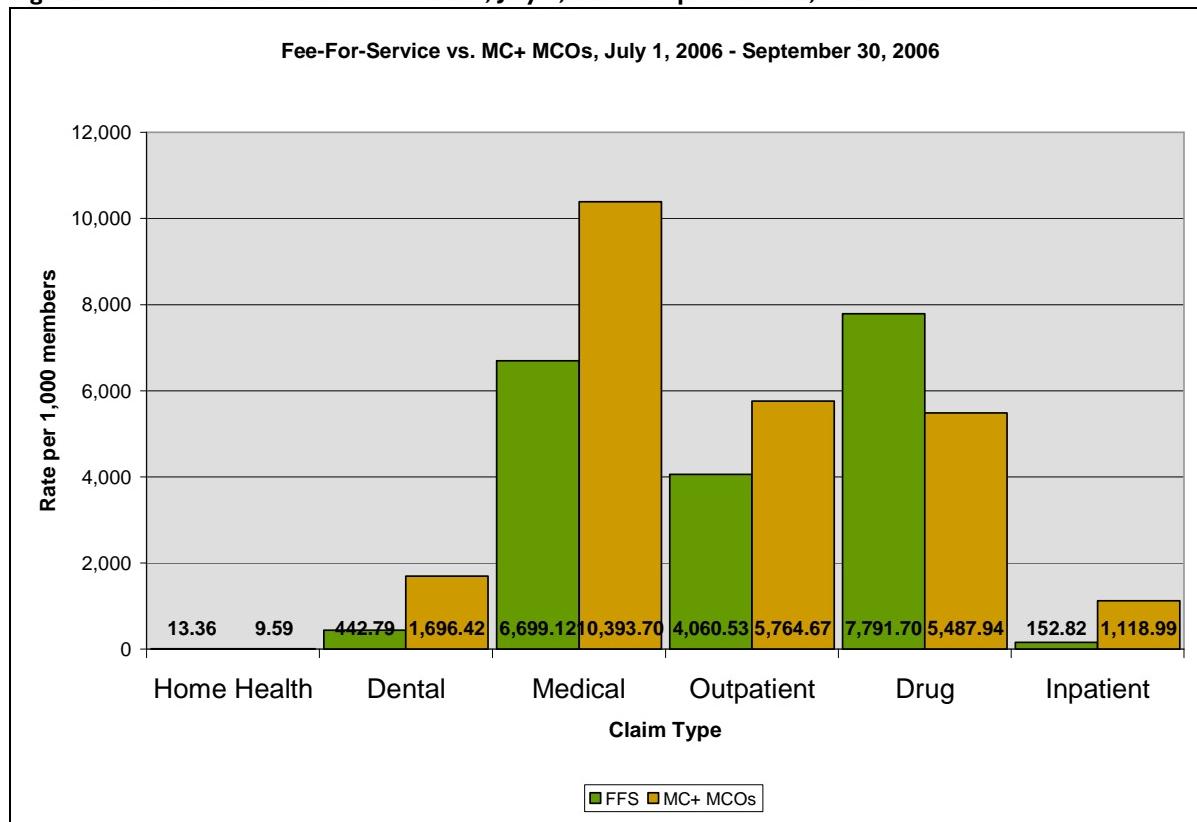
**Note:** Rate per 1,000 members is an estimated annual rate based on third quarter state encounter data; Rate per 1,000 members = Number Claims July 1, 2006 – September 30, 2006 / (Number members / 4) X 1,000. Enrollment as of the last week of September 2006 was used to calculate the rate per 1,000 members. Source: Missouri Department of Social Services, Division of Medical Services Monthly Enrollment Stats Report.

**Table 48 – MC+ MCOs, Rate per 1,000 Members all Encounter Claims**

<b>Claim Type</b>	<b>Number of Claims</b>	<b>Total Members</b>	<b>Claims Per 1,000 Members</b>
Home Health	749	312,440	2.40
Dental	132,507	312,440	424.10
Medical	811,852	312,440	2,598.43
Outpatient	450,278	312,440	1,441.17
Drug	428,663	312,440	1,371.99
Inpatient	87,404	312,440	279.75

**Note:** Rate per 1,000 members is an estimated annual rate based on third quarter state encounter data; Rate per 1,000 members = Number Claims July 1, 2006 – September 30, 2006 / (Number members / 4) X 1,000. Enrollment as of the last week of September 2006 was used to calculate the rate per 1,000 members. Source: Missouri Department of Social Services, Division of Medical Services encounter claims extract file, February 15, 2007.

It is important to note, that in all claim types, except Home Health and Pharmacy, MC+ MCO members are receiving more services than the services being received by their fee-for-service counterparts. This may be due to a greater level of illness among the MC+ population, or in contrast, it may be due to the greater access and availability of services in the managed care model. See Table 47 and 48, and Figure 35.

**Figure 35 – Fee-for-Service vs. MC+ MCOs, July 1, 2006 – September 30, 2006**

### To What Extent do the MC+ MCO claims (paid and unpaid) match the State Encounter Claims Paid Claims Data Base?

All five MC+ MCOs submitted the requested internal control numbers (ICNs) generated by the SMA data system for the “paid” vs. “unpaid” analysis. This is an improvement over the 2005 review, when only two MC+ MCOs submitted that information to the EQRO. All encounter claims submitted by Mercy CarePlus were of “paid” claim status. Health Care USA, Missouri Care, and Children’s Mercy Family Health Partners submitted encounter claims that were “paid” or “denied” status, however no “unpaid” claims were submitted by any of these MC+ MCOs. Only Blue Advantage Plus of Kansas City submitted claims with a status of “unpaid”, BA+ also submitted claims with the status of “paid” and “denied”.

The ICNs were used to match the encounters of each claim type (Inpatient, Outpatient, and Pharmacy) between the MC+ MCO and the SMA extract files. A “match” was considered if the MC+ MCO sample encounter was identified in the SMA database.

### **What types of paid encounter data are missing and why?**

There were no unmatched “paid” encounters within all claim types (Inpatient, Outpatient, and Pharmacy) for all MCOs.

For all MC+ MCOs, all unmatched encounters were due to missing ICN numbers, which are required to match the encounter to that of the SMA. Within the Pharmacy Claim type, 100.00% of the fifteen unmatched encounters were missing ICN numbers. Therefore, all were legitimately missing from the SMA data. For the Outpatient data, 100.00% of the 616 unmatched claims were missing ICN numbers. Therefore, all were legitimately missing from the SMA file. Of the 616 unmatched claims, sixty-six of those were of “denied” status and would not be expected to be present in the SMA file. For Inpatient Claims, all unmatched claims were missing ICNs.

### **What is the fault/match rate of paid and unpaid encounter claims in the SMA encounter claim database and the MC+ MCO claims database?**

For all MC+ MCOs, of all the Pharmacy Claim type data submitted to the EQRO (n = 428,633), only 15 were of “unpaid” status. These 15 claims were the only Pharmacy claims not matched in the SMA data. Thus, 99.99% of the submitted Pharmacy encounters matched with the SMA encounter records. For all Outpatient Claim Types (Medical, Dental, Home Health, & Hospital; n = 1,395,386), 530 “denied” claims were submitted by all MC+ MCOs. All of these claims were unmatched with the SMA encounter data. There was a “hit” rate of 99.96% between Outpatient encounter claims and the SMA encounter data. For the Inpatient Claim Type, data submitted to the EQRO (n = 87,404), 206 “denied” claims were submitted. These claims were not found in the SMA encounter data. There were a total of 223 unmatched records (17 “unpaid” claims were submitted) between all MC+ MCOs and the SMA, yielding a 99.74% “hit” rate.

**What services are being provided that are not being paid and how many services are being provided that are not being paid?**

Unpaid encounter claims were submitted for all encounter categories. 15 unpaid claims were submitted for all MC+ MCOs for Pharmacy claims. 154 unpaid claims were submitted for all MC+ MCOs for all Outpatient claims and 198 unpaid claims were submitted for all MC+ MCOs for Inpatient services. These unpaid claims represent less than .02% of all claims submitted to the SMA.

**To What Extent Do the Claims in the State Encounter Claims Database Reflect the Information Documented in the Medical Record? What is the Fault/Match Rate between State Encounter Claims and Medical Records?**

Table 49 shows the population (number of encounters), minimum required sample size, the number of encounters sampled, and the number and rate of records submitted for review. Of the 1,736,000 encounter claim types in the SMA encounter claims extract file for July 1, 2006 through September 30, 2006, 500 encounters (100 per MC+ MCO) were randomly selected. This was an oversample, as the minimum required sample size was 88 per MC+ MCO. Providers were requested to submit medical records for review. For the 500 selected encounters, there were 487 medical records (97.40%) submitted for review. This is a substantial increase over the 86.71% submitted for review during the 2005 audit. MC+ MCO submission rates ranged from 89.0% (MercyCare Plus) to 100.0% (Blue Advantage Plus, Family Health Partners, and Missouri Care). Encounters for which no documentation was submitted were unable to be validated. Table 50 and Figure 36 show the results of the match for procedures. Across all MC+ MCOs, 73.24% of the medical records contained matching procedure codes or descriptors, this is an increase of 21.24% from the 2005 audit which found only 52.0% of the medical records contained matching procedure codes or descriptors. MC+ MCO match rates ranged from 59.74% (MercyCare Plus) to 81.33% (HealthCare USA). One MC+ MCO (HealthCare USA, 81.33%; z = 1.24, 95% CI: 75.19, 87.47; p < .05) had match rates significantly higher than the rate for all MC+ MCOs. The remaining four MC+ MCOs had match rates consistent with the rate for all MC+ MCOs. The CMS Protocols suggest a 99% match rate as a validity criterion. The match rate for all MC+ MCOs for the procedure was 73.24%, with MC+ MCO match rates ranging from 69.7% to 83.56%. When considering only the documentation submitted for review, the match rate for all MC+ MCOs for procedures was 75.63%.

**Table 49 - Encounter Data Validation Samples and Medical Record Submission Rate**

<b>MC+ MCO</b>	<b>Number Encounters</b>	<b>Minimum Sample Size</b>	<b>Number Encounters Sampled</b>	<b>Number Medical Records Received</b>	<b>Submission Rate</b>
MercyCare Plus	269,134	88	100	89	89.00%
Health Care USA	891,710	88	100	98	98.00%
Missouri Care	213,368	88	100	100	100.00%
Family Health Partners	204,783	88	100	100	100.00%
Blue Advantage Plus	157,005	88	100	100	100.00%
<b>All MC+ MCOs</b>	<b>1,736,000</b>	<b>440</b>	<b>500</b>	<b>487</b>	<b>97.40%</b>

**Note:** The number of encounters represents the number of unique Medical claim types found in the SMA encounter claims extract file for the period July 1, 2006 through September 30, 2006. The minimum sample size is based on the validation of medical records for two dependent variables, the procedure code and the diagnosis code. Number Encounters Sampled = Number of unique encounters randomly sampled by the EQRO for medical record review validation. Number Medical Records Received = Number medical records submitted by MC+ MCO providers; Number Claim Forms Received = Number claim forms submitted by MC+ MCO providers; Submission Rate = Proportion of medical records submitted of the number of encounters sampled.

Source: Missouri Department of Social Services, Division of Medical Services encounter claims extract file, January 15, 2007.  
BHC, Inc. 2006 External Quality Review Validation of Encounter Data.

**Table 50 - Procedure Validation Rate**

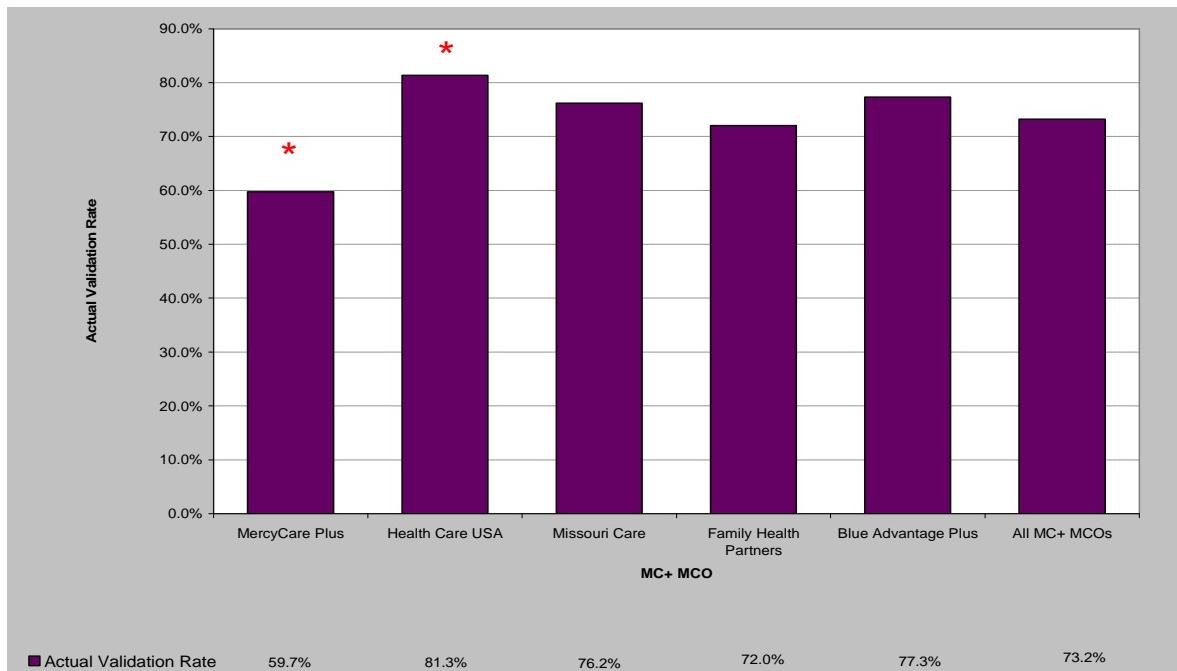
MC+ MCO	Number Encounters Sampled	Number Medical Records Received	Number Validated	Rate Validated of Medical Records Received	Actual Validation Rate	Error (Fault) Rate	z	p	LCL	UCL
MercyCare Plus	77	66	46	69.70%	59.74%	40.26%	-0.4371204	0.102	53.60%	65.88%
Health Care USA	75	73	61	83.56%	81.33%	18.67%	1.2358993	0.035	75.19%	87.47%
Missouri Care	84	84	64	76.19%	76.19%	23.81%	0.3464367	0.907	70.05%	82.33%
Family Health Partners	100	100	72	72.00%	72.00%	28.00%	-0.1592188	0.311	65.86%	78.14%
Blue Advantage Plus	75	75	58	77.33%	77.33%	22.67%	0.4843428	0.670	71.19%	83.47%
<b>All MC+ MCOs</b>	<b>411</b>	<b>398</b>	<b>301</b>	<b>75.63%</b>	<b>73.24%</b>	<b>26.76%</b>	0.2785809	0.000	67.10%	79.38%

**Note:** Number Encounters Sampled = Number of unique encounters randomly sampled by the EQRO for medical record review validation; Number Medical Records Received = Number medical records submitted by MC+ MCO providers for validation; Number Validated = Number of encounters for which there was a similar or matching procedure code or description on the claim form, or adequate documentation in the medical record to support the procedure code as judged by a professional medical coder. Rate Validated of Medical Records Received = Number Validated/Number Medical Records Received; Actual Rate Validated = Number Validated/Number Encounters Sampled; LCL = Lower Confidence Limit at the 95% confidence level; UCL = Upper Confidence Limit at the 95% confidence level.

**Source:** Missouri Department of Social Services, Division of Medical Services encounter claims extract file January 15, 2007. BHC, Inc. 2006 External Quality Review Validation of Encounter Data.



**Figure 36 - Encounter Data Procedure Validation Rate, July 1, 2006 – September 30, 2006**



**Note:** \* Indicates values are significant at the 95% level of significance, two-tailed z-test. See corresponding tables for 95% confidence intervals.

Source: Missouri Department of Social Services, Division of Medical Services encounter claims extract file, January 15, 2007. BHC, Inc. 2006 External Quality Review Validation of Encounter Data.

For the validation of the diagnosis, 70.56% matched the diagnosis found in the SMA encounter claims extract file across all MC+ MCOs (see Table 51 and Figure 37). MC+ MCO match rates ranged from 53.25% (MercyCare Plus) to 84.0% (HealthCare USA) of the medical records or claim forms for diagnosis codes. One MC+ MCO (HealthCare USA, 84.0%,  $z = 1.24$ , 95% CI: 74.81, 93.19;  $p < .01$ ) had match rates significantly higher than the rate for all MC+ MCOs; while one MC+ MCO (MercyCare Plus, 53.25%,  $z = -.71$ , CI: 44.06, 62.43;  $p < .05$ ) had a significantly lower rate. The CMS Protocol suggests a greater than 90% validity criterion.<sup>17</sup> No MC+ MCO met that validity criterion.

<sup>17</sup> Validating Encounter Data, A protocol for use in Conducting Medicaid External Quality Review Activities, Department of Health and Human Services, Centers for Medicare and Medicaid Services, Final Protocol, Version 1.0, May 1, 2002.

**Table 51 – Encounter Data Diagnosis Validation Rate- July 1, 2006 – September 30, 2006**

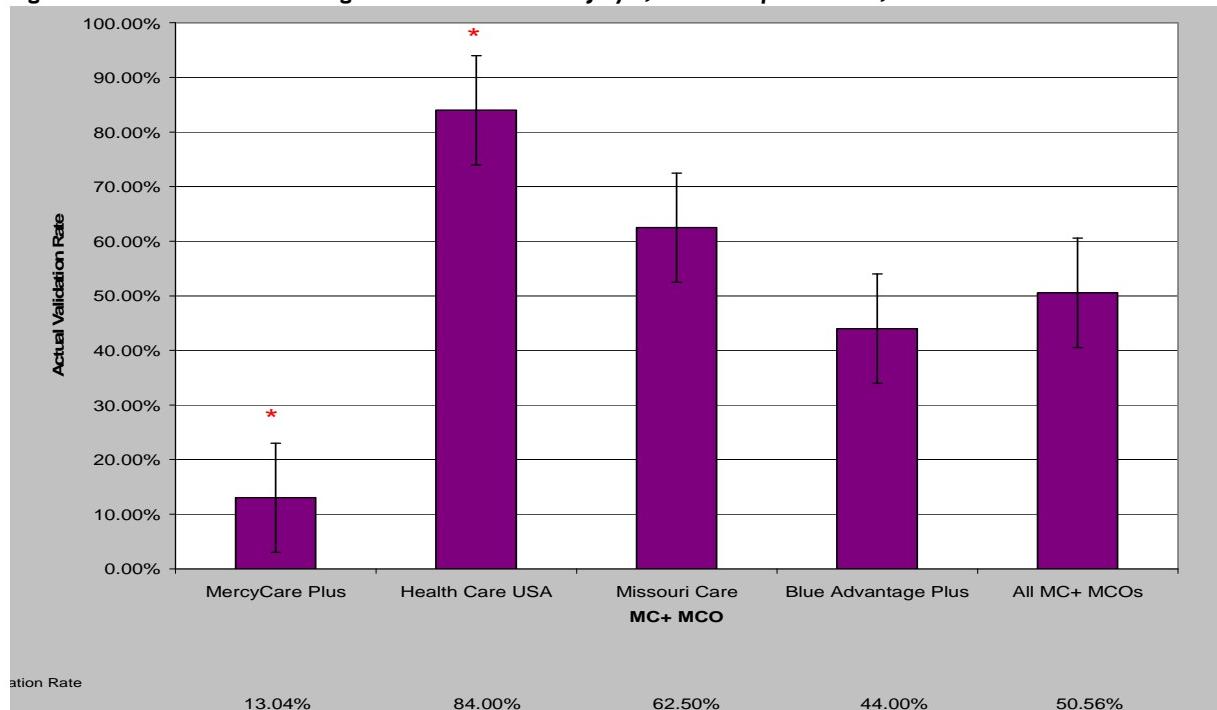
<b>MC+ MCO</b>	<b>Number Encounters Requested</b>	<b>Number Medical Records Received</b>	<b>Number Validated</b>	<b>Rate Validated of Medical Records Received</b>	<b>Actual Validation Rate</b>	<b>Error (Fault) Rate</b>	<b>z</b>	<b>p</b>	<b>LCL</b>	<b>UCL</b>
MercyCare Plus	77	66	41	62.12%	53.25%	46.75%	-0.7052654	0.048	43.32%	63.17%
Health Care USA	75	73	63	86.30%	84.00%	16.00%	1.2443248	0.000	74.08%	93.92%
Missouri Care	84	84	67	79.76%	79.76%	20.24%	0.7170629	0.230	69.84%	89.69%
Family Health Partners	100	100	64	64.00%	64.00%	36.00%	-0.5537831	0.101	54.08%	73.92%
Blue Advantage Plus	75	75	55	73.33%	73.33%	26.67%	0.1987420	0.967	63.41%	83.26%
<b>All MC+ MCOS</b>	<b>411</b>	<b>398</b>	<b>290</b>	<b>72.86%</b>	<b>70.56%</b>	<b>29.44%</b>	0.1609267	0.966	60.64%	80.48%

Encounters Sampled = Number of unique encounters randomly sampled by the EQRO for medical record review validation; Number Medical Records Received = Number medical records submitted by MC+ MCO providers for validation; Number Validated = Number of encounters for which there was a matching diagnosis code, documentation or description in the medical record or on the claim form. Rate Validated of Medical Records Received = Number Validated/Number Medical Records Received; Actual Rate Validated = Number Validated/Number Encounters Sampled; LCL = Lower Confidence Limit at the 95% confidence level; UCL = Upper Confidence Limit at the 95% confidence level.

Source: Missouri Department of Social Services, Division of Medical Services encounter claims extract file, January 15, 2007. BHC, Inc. 2006 External Quality Review Validation of Encounter Data.



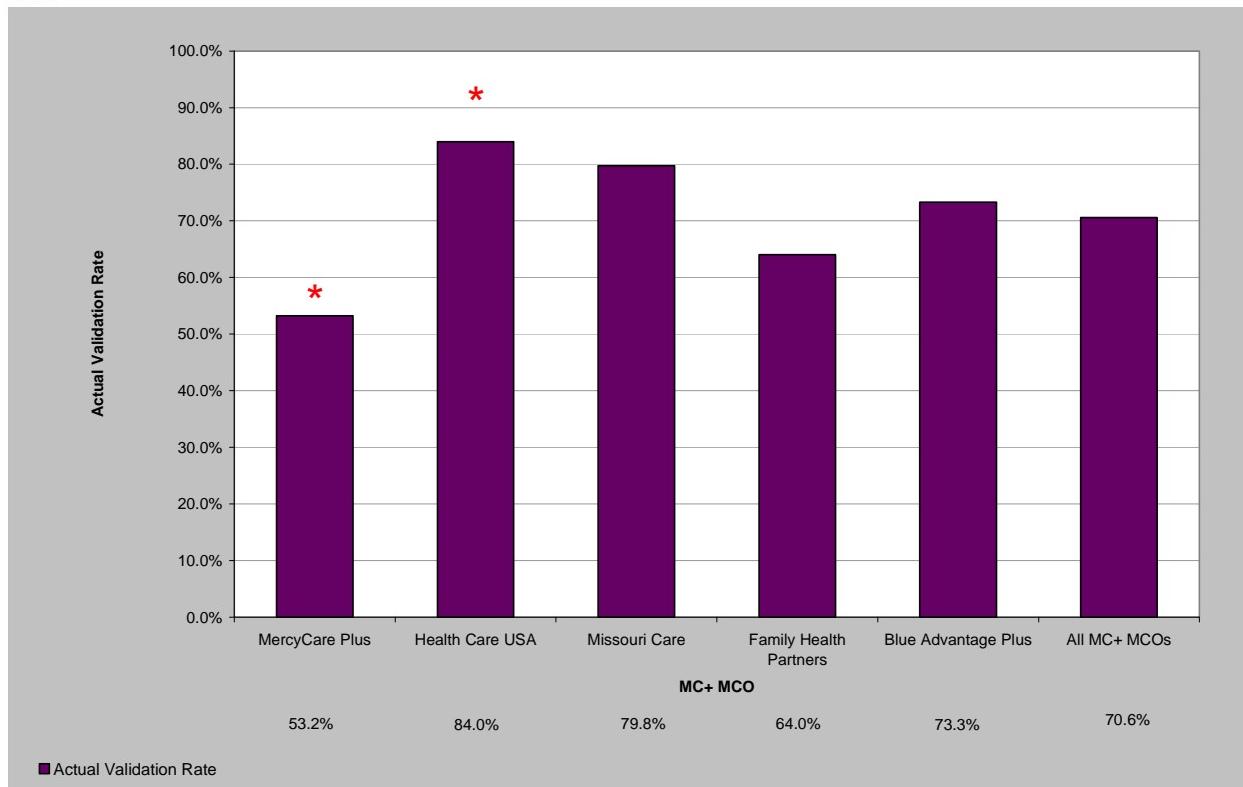
**Figure 37 - Encounter Data Diagnosis Validation Rate- July 1, 2006 – September 30, 2006**



Encounters Sampled = Number of unique encounters randomly sampled by the EQRO for medical record review validation; Number Medical Records Received = Number medical records submitted by MC+ MCO providers for validation; Number Validated = Number of encounters for which there was a matching diagnosis code, documentation or description in the medical record or on the claim form. Rate Validated of Medical Records Received = Number Validated/Number Medical Records Received; Actual Rate Validated = Number Validated/Number Encounters Sampled; LCL = Lower Confidence Limit at the 95% confidence level; UCL = Upper Confidence Limit at the 95% confidence level.

Source: Missouri Department of Social Services, Division of Medical Services encounter claims extract file, January 15, 2007. BHC, Inc. 2006 External Quality Review Validation of Encounter Data.

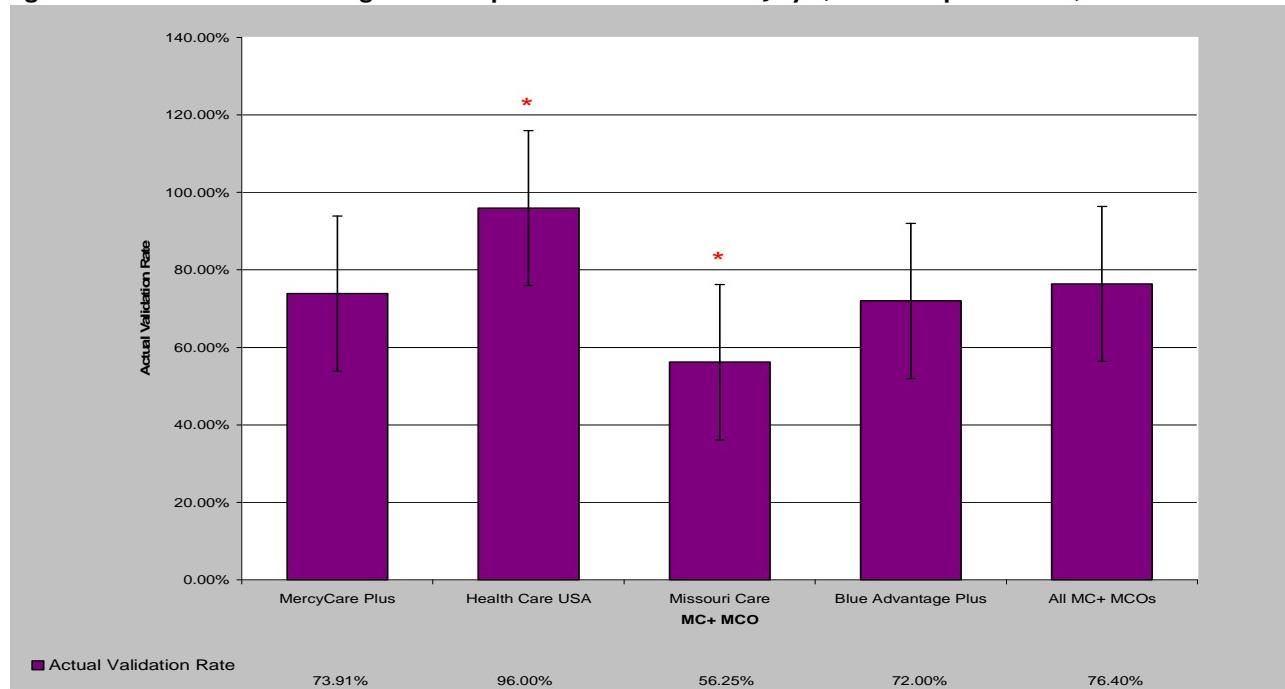
**Figure 38 - Encounter Data Drug Quantity Dispensed Validation Rate- July 1, 2006 – September 30, 2006**



**Note:** Number Encounters Sampled = Number of unique encounters randomly sampled by the EQRO for medical record review validation; Number Medical Records Received = Number medical records submitted by MC+ MCO providers for validation; Number Validated = Number of encounters for which there was a matching diagnosis code, documentation or description in the medical record or on the claim form. Rate Validated of Medical Records Received = Number Validated/Number Medical Records Received; Actual Rate Validated = Number Validated/Number Encounters Sampled; LCL = Lower Confidence Limit at the 95% confidence level; UCL = Upper Confidence Limit at the 95% confidence level.

Source: Missouri Department of Social Services, Division of Medical Services encounter claims extract file, January 15, 2007. BHC, Inc. 2006 External Quality Review Validation of Encounter Data.

For validation of the Quantity of Drug Dispensed, 50.56% matched the quantity found in the SMA encounter claims extract file across all MC+ MCOs (see Table 51 and Figure 38). MC+ MCO match rates ranged from 13.04% (MercyCare Plus) to 84.0% (HealthCare USA) of the medical records (pharmacy records) or claims forms for quantity dispensed. One MC+ MCO (Mercy Care Plus, 13.04%,  $z = -1.26$ , 95% CI: -9.23, 35.31;  $p < .05$ ) had match rates significantly lower than the rate of all MC+ MCOs, while one MC+ MCO (HealthCare USA, 84.0%,  $z = 1.10$ , 95% CI: 61.73, 100;  $p < .05$ ) had match rates significantly higher than the rate of all MC+ MCOs.

**Figure 39 - Encounter Data Drug Name Dispensed Validation Rate- July 1, 2006 – September 30, 2006**

Encounters Sampled = Number of unique encounters randomly sampled by the EQRO for medical record review validation; Number Medical Records Received = Number medical records submitted by MC+ MCO providers for validation; Number Validated = Number of encounters for which there was a matching diagnosis code, documentation or description in the medical record or on the claim form. Rate Validated of Medical Records Received = Number Validated/Number Medical Records Received; Actual Rate Validated = Number Validated/Number Encounters Sampled; LCL = Lower Confidence Limit at the 95% confidence level; UCL = Upper Confidence Limit at the 95% confidence level.

Source: Missouri Department of Social Services, Division of Medical Services encounter claims extract file, January 15, 2007. BHC, Inc. 2006 External Quality Review Validation of Encounter Data.

For validation of the Name of Drug Dispensed, 76.40% matched the name or DCN found in the SMA encounter claims extract file across all MC+ MCOs (see Table 52 and Figure 39). MC+ MCO match rates ranged from 56.25% (Missouri Care) to 96.0% (HealthCare USA) of the medical records (pharmacy records) or claims forms for Name of Drug dispensed. One MC+ MCO (Missouri Care, 56.25%,  $z = -1.12$ , 95% CI: 44.14, 68.36:  $p < .05$ ) had match rates significantly lower than the rate of all MC+ MCOs, while one MC+ MCO (HealthCare USA, 96.0%,  $z = 1.31$ , 95% CI: 83.89, 100:  $p <.05$ ) had match rates significantly higher than the rate of all MC+ MCOs.

## **What Types of Errors Were Noted?**

An error analysis for procedure and diagnosis codes was conducted. For the diagnosis code in the medical record, the reasons for diagnosis codes not matching the SMA encounter claims extract file were incorrect information (n = 2) and missing information (n = 135). Incorrect information included that the diagnosis code listed did not match the descriptive information in the record. Missing information included fields that were blank.

For the procedure code in the medical record, the reasons for procedure codes in the SMA encounter claims extract file not being supported by documentation in the medical record were missing information (n = 89), upcoding (n=6) and incorrect codes (n = 4). Examples of incorrect information included: incorrect codes (n = 2) and codes that did not match the procedure description (n = 2).

For the drug quantity dispensed in the medical record, the reasons for drug quantity dispensed in the SMA encounter claims extract file not being supported by documentation in the medical record included: missing information (n = 44). For the drug name (or NDC) in the medical record, the reasons for drug name dispensed in the SMA encounter claims extract file not being supported by documentation in the medical record included: missing information (n = 21).

## **What Problems Are There With How Files Are Compiled and Submitted by the MCO?**

The EQRO had no problems with how files are compiled and submitted by each MC+ MCO.

## **What Are the Data Quality Issues Associated With the Processing of Encounter Data?**

The EQRO had no data quality issues with SMA and MC+ MCO encounter data during the course of conducting the EQRO. This is the first year of the EQR that the EQRO has received all encounter data in the format requested.

## 4.5 Conclusions

### STRENGTHS

1. MC+ members are receiving more services than their fee-for-services counterparts. The claims data presented above details a much higher rate of claims per 1,000 members for MC+ members. This is likely due to a greater availability of needed services, more access points to care, and the timeliness in which those services are delivered.
2. All Dental and Pharmacy claim type fields examined were 100.00% complete, accurate and valid for all MC+ MCOs. The SMA encounter claims data critical fields examined for accepted and paid claims of this type are valid for analysis.
3. For all MC+ MCOs, the first Outpatient Diagnosis Code field was 100.0% complete, accurate and valid.
4. All MC+ MCOs submitted data in the format requested, and the EQRO was able to perform the analysis of paid and unpaid claims contained in the SMA database.
5. The examination of the level, volume, and consistency of services found significant variability between MC+ MCOs in the rate of each type of claim (Medical, Dental, Inpatient, Outpatient Hospital, Home Health, and Pharmacy), with no patterns of variation noted by MC+ Managed Care Region or type of MC+ MCO.
6. There were no unmatched “paid” encounters within all claim types (Inpatient, Outpatient, and Pharmacy) for all MCOs.
7. Unpaid claims represent less than .02% of all claims submitted to the SMA.

### AREAS FOR IMPROVEMENT

1. For all MC+ MCOs, all unmatched encounters were due to missing ICN numbers, which are required to match the encounter to that of the SMA.
2. For the Medical claim type, there were invalid values for the First Diagnosis Code fields, including blank fields.
3. The Procedure Code field in the Outpatient Home Health and Outpatient Hospital claim types included some invalid information. Most of this was due to blank fields.
4. The Inpatient claim type fields contained incomplete, invalid, and inaccurate fields.
5. The match rates between the SMA database and MC+ MCO medical records for claim type procedures were 76.63%, this is however a significant improvement over last year's match rate of 52.0%. Medical records that did not have procedure codes that matched the SMA encounter claims extract file were in error primarily due to missing or illegible information.
6. The match rates between the SMA database and MC+ MCO medical records for claim type procedures were 72.86%, this is significantly lower than last year's match rate of 99.01%. Medical records that did not have procedure codes that matched the SMA encounter claims extract file were in error primarily due to missing or illegible information.

## RECOMMENDATIONS

1. It is recommended that the SMA institute additional edits for the Medical, Inpatient and Outpatient Hospital claim types to edit claims with blank fields or dummy values (e.g., “000” and “99999999”).
2. The SMA should continue to provide timely feedback to MC+ MCOs regarding the rate of acceptance of each claim type and the types of errors associated with rejected claims.
3. Additional analysis on the rate of consistency of services should examine demographic (e.g., age and gender distribution), epidemiological (diagnostic variables), and service delivery (e.g., number of users per month, rate of procedures or claim types, units of service rates) characteristics to explain variation across MC+ MCOs or Regions.
4. Medical record reviews should continue to be targeted toward validation of diagnosis and procedure codes.
5. The SMA should clarify the expectations for MC+ MCOs in the level of completeness, accuracy, and validity and which data fields are required (e.g., Diagnosis Code fields 2 through 5); provide timely feedback to MC+ MCOs when standards are not met; and develop corrective action plans when standards are not met within a reasonable amount of time established by the SMA.
6. MC+ MCOs will need to submit data to the EQRO in requested formats, using the field names and file formats requested.

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## 5.0 MC+ MCO COMPLIANCE WITH MANAGED CARE REGULATIONS

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## 5.1 Purpose and Objectives

The External Quality Review (EQR) is conducted annually in accordance with the Medicaid Program: External Quality Review of the Medicaid Managed Care Organizations Final Rule, 42 CFR 438, Subpart E.” The original objective of this portion of the 2004 review was to analyze and evaluate the MC+ Managed Care Organizations (MC+ MCOs) to assess their level of compliance with federal regulations regarding quality, timeliness and access to health care services. In the two subsequent years, beginning in 2005 and culminating in 2006, the objective is to complete follow-up reviews to ensure improved and continued compliance with these regulations on the part of the MC+ MCOs. To complete this process, the “Monitoring Medicaid Managed Care Organizations (MCOs) and Prepaid Inpatient Health Plans (PIHPs): A Protocol for Determining Compliance with Medicaid Managed Care Regulations” (Compliance Protocol) requirements was applied to the review process, with an emphasis on areas where individual MCOs failed to comply or were in only partial compliance at the time of the prior reviews. Specifically, the MCOs were reviewed to assess MC+ MCO compliance with the federal Medicaid managed care regulations; with the State Quality Strategy; with the Missouri MC+ Medicaid Managed Care contract requirements; and the progress made in achieving quality, access, and timeliness to services from the previous review year. To enhance this process in 2006 two additional activities occurred. A case review of Grievance and Appeal files, following up on findings from 2004 and 2005, was completed. A second case review focusing on Behavioral Health Case Management files, a follow-up from the 2003 External Quality Review occurred. The results of these two reviews are included in the appropriate sections of this report.

## 5.2 Technical Methods

### PLANNING COMPLIANCE MONITORING ACTIVITIES

#### Establishing Contact with the MC+ MCOs

All MC+ MCOs were contacted during November 2006 to prepare them for the 2006 External Quality Review. All MC+ MCO quality management staff and/or plan administrators were contacted to discuss the onset of External Quality Review Organization (EQRO) activities and



to schedule training teleconferences for early November. The MCOs were explicitly requested to have those staff or subcontractors available who were responsible for obtaining and submitting the data required to complete all validation processes. During the teleconferences, all aspects of the EQR were discussed and details provided regarding all data submissions that would be required.

The training teleconference agenda, methods and objectives, and schedule were sent to all MC+ MCOs, with approval from the State Medicaid Agency (SMA), prior to their scheduled conference. SMA staff arranged to participate in these conference calls allowing time for presentation of information, clarification, and questions.

### **Gathering Information on the MC+ MCO Characteristics**

During the 2006 review year there were seven MC+ MCOs contracted with the State Medicaid Agency (SMA; Missouri Department of Social Services, Division of Medical Services (DMS)) to provide MC+ Medicaid Managed Care in three Regions of Missouri. The Eastern MC+ Region included St. Louis City, St. Louis County, and eight surrounding counties. These MC+ Members were served by three MC+ MCOs: Mercy CarePlus (MCP), HealthCare USA (HCUSA), and Harmony Health Plan of Missouri. The Western MC+ Region included Kansas City/Jackson County and eight surrounding counties. These MC+ Members were served by five MC+ MCOs: Children's Mercy Family Health Partners (CMFHP), FirstGuard, Blue Advantage Plus (BA+), Mercy CarePlus (MCP), and HealthCare USA (HCUSA). The Central MC+ Region included eighteen counties in the center of the state. These MC+ Member were served by three MC+ MCOs: Missouri Care (MOCare), Mercy CarePlus (MCP), and HealthCare USA (HCUSA). Mercy CarePlus and HealthCare USA operated in all three MC+ regions.

During 2006 the MC+ MCO contract was renewed, with the new contract date beginning July 1, 2006. FirstGuard Health Plan did not renew their contract and will not be reviewed in this report. Harmony Health Plan received a contract to provide services in Missouri for the first time. A site visit was made to Harmony Health Plan. Due to the fact that this is a follow-up year in the EQR Compliance review cycle and because of HHP's status as a new MC+ MCO, their review was abbreviated and did not cover all aspects of the compliance protocol at the request of the SMA. The MC+ MCO reviewed as Mercy CarePlus is the result of a merger of

two previous health plans. These MC+ MCOs operated under the names of Mercy Health Plan and Community Care Plus. The review and any comparisons with performance in the 2004 and 2005 External Quality Reviews are made to Community CarePlus, who assumed operations of the merged MC+ MCO now operating as Mercy CarePlus.

### Determining the Length of Visit and Dates

On-site compliance reviews were conducted in two days, with several reviewers conducting interviews and activities concurrently. Documents reviews occurred prior to the complete on-site review at all MC+ MCOs, with the exception of HealthCare USA and Harmony Health Plans. All review activities were completed in a one day visit at these MC+ MCOs. Interviews, presentations, and additional document reviews were scheduled throughout the day, utilizing different team members for Validating Performance Measures, Validating Performance Improvement Projects, Monitoring Medicaid Managed Care Organizations (MCOs) and Prepaid Inpatient Health Plans (PIHPs). The time frames for on-site reviews were determined by the EQRO and approved by the SMA before scheduling each MC+ MCO. The first week was spent reviewing the MC+ MCOs in Eastern MC+ Region. The second review week was spent in the Central MC+ Region. The final visits occurred with the MC+ MCOs in the Western MC+ Region. The following schedule lists the dates of the on-site reviews:

- July 16 & 17, 2007 – Mercy CarePlus
- July 18, 2007 – HealthCare USA
- July 19, 2007 – Harmony Health Plan
- July 23 & 24, 2007 – Missouri Care
- July 31 & August 1, 2007 – Blue Advantage Plus
- July 31 & August 2, 2007 – Children's Mercy Family Health Partners

### Reviewers

Two reviewers conducted the Compliance Protocol activities, including interviews and document review. The External Quality Review Organization (EQRO) Project Director conducted backup activities and oversight of the Compliance Protocol team. The Assistant Project Director was conducting her third review. She has experience with the MC+ Managed Care Program implementation and operations, interviewing, program analysis, and Medicaid managed care programs in other states. The second reviewer participated in five previous MC+

Managed Care Program EQRs and on-site visits. This reviewer was knowledgeable about the MC+ Managed Care Program through her experience as a former SMA employee responsible for quality assessment and improvements, as an RN, and a consultant. All reviewers were familiar with the federal regulations and the manner in which these were operationalized by the MC+ Managed Care Program prior to the implementation of the protocols.

### **Establishing an Agenda for the Visit**

An agenda was developed to maximize the use of available time, while ensuring that all relevant follow-up issues were addressed. A sample schedule was developed that specified times for all review activities including the entrance conference, document review, Validating Performance Improvement Project evaluation, Validating Performance Measures review, conducting the interview for the Compliance Protocol, and the exit conference. A coordinated effort with each MC+ MCO occurred to allow for the most effective use of time for the EQRO team and MC+ MCO staff. The schedule for the on-site reviews was approved by the SMA in advance and forwarded to each MC+ MCO to allow them the opportunity to prepare for the review.

Appendix II provides a sample agenda for the on-site reviews.

### **Providing Preparation Instructions and Guidance to the MC+ MCOs**

A letter (see Appendix 14) was sent to each MC+ MCO indicating the specific information and documents required on-site, and the individuals requested to attend the interview sessions. The MC+ MCOs scheduled their own staff to ensure that appropriate individuals were available and that all requested documentation was present during the on-site review day.

### **OBTAINING BACKGROUND INFORMATION FROM THE STATE MEDICAID AGENCY**

Interviews and meetings occurred with individuals from the SMA from September 2006 through May 2007 to prepare for the on-site review, and obtain information relevant to the review prior to the on-site visits. Individuals from the SMA included in these meetings were:

- Sandra Levels, Director of Program Management
- Susan Eggen – Assistant Deputy Director, MC+ Managed Care
- Andrea Smith – Quality Nurse Reviewer
- Julie Creech, MC+ Managed Care QA & I Manager

In February 2007, Compliance Review team members met with the SMA MC+ Managed Care QA & I Manager. The latest information on MC+ MCO compliance with the July 1, 2006 MC+ Medicaid Managed Care contract was reviewed. All documentation gathered by the SMA was clarified and discussed to ensure that accurate interpretation of the SMA findings was reflected in the review comments and findings. The SMA staff continued to complete their review of MC+ MCO policy submissions. They provided periodic updates on approvals throughout the EQR preparation up to the beginning of the on-site review process. SMA expectations, requirements, and decisions specific to the MC+ Managed Care Program were identified during these meetings.

## DOCUMENT REVIEW

Documents chosen for review were those that best demonstrated the MC+ MCO's ability to meet federal regulations. Certain documents, such as the Member Handbook, provided evidence of communication to members about a broad spectrum of information including enrollee rights and the grievance and appeal process. Provider handbooks were reviewed to ensure that consistent information was shared regarding enrollee rights and responsibilities. SMA MC+ Medicaid Managed Care contract compliance worksheets, and specific policies that are reviewed annually or that are yet to be approved by the SMA, were reviewed to verify the presence or absence of evidence that required written policies and procedures existed meeting federal regulations. Other information, such as the Annual Quality Improvement Program Evaluation, was requested and reviewed to provide insight into the MC+ MCO's report of their compliance with the requirements of the MC+ Medicaid Managed Care contract and the federal regulations. A random selection of grievance and appeal records for both members and providers were reviewed at each on-site visit in an effort to obtain evidence of each MC+ MCO's compliance with their own policy. Tracking logs relating to a number of issues were reviewed and discussed at the request of the SMA, to ensure that local procedures and practices corresponded to the written policies submitted for approval. When it was found that specific regulations were "Not Met" or "Partially Met," additional documents were requested of each MC+ MCO. In addition, interview questions were developed to address the areas for which compliance was not fully established through the pre-site document review process.

The following documents were reviewed for all MC+ MCOs:

- State contract compliance ratings from 2006 and updated policies accepted through June 2007
- Results, findings, and follow-up information from the 2005 External Quality Review
- 2005 Annual MC+ MCO Evaluation, submitted April 2006

## CONDUCTING INTERVIEWS

After completing the initial document review, it was necessary to determine how policies were implemented, the progress that was made since the 2005 review, changes that occurred with one reorganized MC+ MCO, the activities that were occurring with a new MC+ MCO, and the efforts that were made to rectify areas where the MC+ MCOs were found “Partially Met” during the 2005 review process. On-site interviews with MC+ MCO staff enabled reviewers to obtain a clearer picture of the degree of compliance achieved, as well as any corrective action taken by each MC+ MCO. This process revealed a wealth of information about the approach each MC+ MCO took to become compliant with federal regulations. It also provided evidence of systems that delivered quality and timely services to members, and the degree to which appropriate access was available. The interviews provided reviewers with the opportunity to explore issues not addressed in the documentation, including follow-up from the 2005 EQRO evaluation. A site visit questionnaire was developed for each MC+ MCO based on their MC+ Medicaid Managed Care contractual compliance, issues identified for clarification, and information presented in their 2005 Annual Report.

## COLLECTING ACCESSORY INFORMATION

Additional information used in completing the compliance determination included: discussions with the EQR reviewers and MC+ MCO QI/UM staff regarding management information systems; Validating Encounter Data; Validating Performance Measures; and Validating Performance Improvement Projects. The review evaluated information from these sources to validate MC+ MCO compliance with the pertinent regulatory provisions within the Compliance Protocol. These findings were documented on the BHC MC+ MCO Compliance Review Scoring Form (see Appendix 12), and were used to make final rating recommendations.

## ANALYZING AND COMPILING FINDINGS

The review process included gathering information and documentation from the SMA about policy submission and approval, which directly affects each MC+ MCO's contract compliance. This information was analyzed to determine how it related to compliance with the federal regulations. Next, interview questions specific to each MC+ MCO were prepared, based on the need to investigate if practice existed in areas where approved policy was not available, and if local policy and procedures were in use when approved policy was not complete. The interview responses and additional documentation obtained on-site were then analyzed to evaluate how they contributed to the MC+ MCO's compliance. All information gathered was assessed, re-reviewed and translated into recommended compliance ratings for each regulatory provision. This information was recorded on the MC+ MCO scoring form and can be found in the protocol specific sections of this section of the report.

## REPORTING TO THE STATE MEDICAID AGENCY

During the August 2007 meeting with the SMA preliminary findings and comparisons to the ratings from the 2006 review were presented. Discussion occurred with the SMA staff to ensure that the most accurate information was recorded and to confirm that a sound rationale was used in rating determinations. The SMA approved the process and allowed the EQRO to finalize the ratings for each regulation. Sufficient detail is included in all worksheets to substantiate any rating lower than "Met." Final worksheets were submitted to the SMA. The actual ratings are included in this report.

## COMPLIANCE RATINGS

From January 2007 through June 2007, the MCO Compliance Review Scoring Form for each MC+ MCO was updated to reflect their current level of MC+ Medicaid Managed Care contract compliance. The Scoring Form continued to present a crosswalk of contract references that created compliance with each federal regulation. The SMA instructed the EQRO to utilize the Compliance Rating System developed during the previous review. This system was based on a three-point scale ("Met," "Partially Met," "Not Met") for measuring compliance, as determined by the EQR analytic process. Appendix I2 contains the BHC MCO Compliance Review Scoring Form worksheet utilized for all MC+ MCOs. The determinations found in the Compliance Ratings considered SMA contract compliance, review findings, MC+ MCO policy, ancillary

documentation, and MC+ MCO practices observed on-site. In some instances the SMA MC+ Medicaid Managed Care contract compliance tool rated a contract section as “Met” when policies were submitted, even if the policy had not been reviewed and “finally approved.” If the SMA considered the policy submission valid and rated it as “Met,” this rating was used unless practice or other information called this into question. If this conflict occurred, it was explained on the Compliance Review Scoring Form. The scale allowed for credit when a requirement was Partially Met. Ratings were defined as:

<b>Met:</b>	All documentation listed under a regulatory provision, or one of its components was present. MC+ MCO staff was able to provide responses to reviewers that were consistent with one another and the available documentation. Evidence was found and could be established that the MC+ MCO was in full compliance with regulatory provisions.
<b>Partially Met :</b>	There was evidence of compliance with all documentation requirements, but staff was unable to consistently articulate processes during interviews; or documentation was incomplete or inconsistent with practice.
<b>Not Met:</b>	Incomplete documentation was present and staff had little to no knowledge of processes or issues addressed by the regulatory provision.

## 5.3 Findings

### ENROLLEE RIGHTS AND PROTECTIONS

Subpart C of the regulatory provisions for Medicaid managed care (Enrollee Rights and Protections) sets forth 13 requirements of MCOs for the provision of information to enrollees in an understandable form and language: written policies regarding enrollee rights and assurance that staff and contractors take them into account when providing services; and requirements for payment and no liability of payment for enrollees. There were no items across MC+ MCOs that were rated as “Not Met” (see Table 52). Across all MC+ MCOs, 90.77% of the regulations were “Met.” This is a significant improvement over the rate of 76.92% at the time of the 2005 EQR. Four MCOs (Children’s Mercy Family Health Partners, Missouri Care, HealthCare USA, and Blue Advantage Plus) were found to be 100% compliant. One MCO was rated at 53.8% (Mercy CarePlus). This is an improvement over their rating of 46.2% compliance at the time of the previous review.

**Table 52 – Subpart C: Enrollee Rights and Protections**

<b>Federal Regulation</b>	<b>MC+ MCO</b>						<b>All MC+ MCOs</b>			
	<b>MCP</b>	<b>Harmony</b>	<b>HCUSA</b>	<b>MOCare</b>	<b>CMFHP</b>	<b>BA+</b>	<b>Number Met</b>	<b>Number Partially Met</b>	<b>Number Not Met</b>	<b>Rate Met</b>
438.100(a) Enrollee Rights: General Rule	1	na	2	2	2	2	4	1	0	80.0%
438.10(b) Enrollee Rights: Information Requirements	1	na	2	2	2	2	4	1	0	80.0%
438.10(c)(3) Alternative Language: Prevalent Language	2	na	2	2	2	2	5	0	0	100.0%
438.10(c)(4,5) Language and Format: Interpreter Services	2	na	2	2	2	2	5	0	0	100.0%
438.10(d)(1)(i) Information Requirements: Format/Easily Understood	1	na	2	2	2	2	4	1	0	80.0%
438.10(d)(1)(ii)and (2) Information Requirements: Format Visually Impaired, and Limited Reading Proficiency	1	na	2	2	2	2	4	1	0	80.0%
438.10(f) Information for All Enrollees: Free Choice, etc.	2	na	2	2	2	2	5	0	0	100.0%
438.10 (g) Information to Enrollees: Specifics/Physician Incentive Plans	2	na	2	2	2	2	5	0	0	100.0%
438.10(i) Special Rules: Liability for Payment/Cost Sharing	2		2	2	2	2	5	0	0	100.0%
438.100(b)(2)(iii) Enrollee Rights: Provider-Enrollee Communications	1	na	2	2	2	2	4	1	0	80.0%
438.100(b)(2)(iv,v) Rights to Refuse Services/Advance Directives	2	na	2	2	2	2	5	0	0	100.0%
438.100(b)(3) Right to Services	1	na	2	2	2	2	4	1	0	80.0%
438.100(d) Compliance with Other Federal/State Laws	2	na	2	2	2	2	5	0	0	100.0%
Number Met	7		13	13	13	13	<b>59</b>	<b>6</b>	<b>0</b>	<b>90.77%</b>
Number Partially Met	6		0	0	0	0				
Number Not Met	0		0	0	0	0				
Rate Met	53.8%		100.0%	100.0%	100.0%	100.0%				

Note: 0 = Not Met; 1 = Partially Met ; 2 = Met

Sources: Department of Health and Human Services Centers for Medicare & Medicaid Services (2003). Monitoring Medicaid Managed Care Organizations (MCOs) and Prepaid Inpatient Health Plans (PIHPs): A protocol for determining compliance with Medicaid Managed Care Proposed Regulations at 42 CFR Parts 400, 430, et al. Final Protocol Version 1.0.; BHC, Inc., 2005 External Quality Review Monitoring MCOs Protocols.

All MC+ MCOs had procedures and practices in place to ensure that members were addressed in their prevalent language [438.10(c)(3)]; that members are treated with respect and dignity and receive information on available treatment options and alternatives [438.100(b)(2)(iii)]; and the MC+ MCO is in compliance with other state requirements [438.100(d)].

A number of MC+ MCOs (Children's Mercy Family Health Partners, Missouri Care, Mercy CarePlus, Blue Advantage Plus) utilized EQR tools, including the MCO Compliance Review Scoring Form, to assist them in ensuring completion of required policy as well as meeting the requirements of the federal regulations. Improvement was noted in the attention the majority of the MC+ MCOs gave to meeting all standards of compliance. Tracking systems were put in place, and in some situations staff members were assigned to monitor compliance issues. The MC+ MCOs stressed their heightened awareness of the need for positive interdepartmental communication. These efforts focused on strengthening communication to enhance the organizations' ability to serve members needs.

Several of the MC+ MCOs (Children's Mercy Family Health Partners, Blue Advantage Plus) utilized a Member Advisory Committee to provide insight into the issues faced by members in trying to obtain healthcare services. The MC+ MCO incorporated member suggestions into their operations and marketing materials. These activities were indicators of the MC+ MCO's commitment to member services and to ensuring members had quality healthcare.

All MC+ MCOs continued to operate programs for the provision of behavioral health services. Four of the MC+ MCOs subcontract with Behavioral Health Organizations (BHOs) for these services. One MC+ MCO (Missouri Care) has moved the supervision and delivery of this service in-house. One MC+ MCO (Harmony) currently contracts for this service, but will be utilizing a subsidiary of their parent company to provide behavioral health services during 2007.

All MC+ MCOs provided active oversight, if not direct involvement, of their behavioral health subcontractors. Behavioral Health Services have evolved into an important resource for MC+ Medicaid Managed Care members. A majority of the MC+ MCO BHOs (Unity Managed Mental Health, MHNet, Missouri Care, New Directions Behavioral Health, and CommCare) approved

the use of in-home services to reach members who would not attend appointments in an office setting. This not only ensured that members obtained the help they needed, but also prevented missed appointment for providers. One BHO (New Directions Behavioral Health) continued to contract with a provider agency that delivered short-term intensive in-home services in an effort to avert crisis that may lead to inpatient treatment, and to work with members to utilize all available community resources. Two MCOs (Mercy CarePlus, HealthCare USA) reported on initiatives to engage members who were pregnant, in an attempt to identify any mental health issues that might affect the mother and/or baby. These efforts also focused on prevention of postpartum depression. One MC+ MCO (Children's Mercy Family Health Partners) described an initiative where in-home services were provided to members following any inpatient treatment to ensure effective follow-up services. The BHO contracted with specific providers who were skilled at working in intensive in-home settings. The BHO absorbed the cost of unreimbursed services, such as after-hours telephone support, in an effort to reduce readmissions for these members. MC+ MCOs and BHOs described a number of interventions that met members' needs, but were extraordinary in normal Medicaid programs. This reflected a level of performance indicative of their strong commitment to access and quality services for all members.

### **COMPLIANCE FOLLOW-UP ACTIVITY – CASE MANAGEMENT (BEHAVIORAL HEALTH)**

Case management is an integral part of the required service delivery package for members of the MC+ Medicaid Managed Care Program who have special healthcare needs. Specific obligations related to case management and coordination of care activities are outlined in the Federal Regulations, the State Contract, and the External Quality Review (EQR) compliance protocol. The emphasis of these requirements is to improve the health status of members through coordination of individual MC+ managed healthcare. The MC+ MCOs monitor high risk MC+ Managed Care members by employing specialized nurses who have regular contact with these members for the purpose of performing case management. The State of Missouri defines care and case management as part of the coordination and continuity of care requirements as follows:

Care Management: The health plan shall provide care management to members. Care management is coordination of care provided to members.

The health plan shall coordinate and deliver services designed to achieve the following outcomes:

- 1) Improve patient care;
- 2) Improve health outcomes;
- 3) Reduction of inappropriate inpatient hospitalization;
- 4) Reduction of inappropriate utilization of emergent services;
- 5) Lower total costs; and
- 6) Better educate providers and patients.

The health plan should have the following components in the care management program:

- 1) Use of clinical practice guidelines;
- 2) Provider and patient profiling;
- 3) Specialized physician and other practitioner care targeted to meet members' special needs;
- 4) Provider education;
- 5) Patient education;
- 6) Claims analyses; and
- 7) Quarterly and yearly outcome measurement and reporting.

Case Management: The health plan must have implemented and effective policies and procedures for case management, care coordination, and disease management:

Case management is understood as including, but not limited to, the development of individualized treatment plans and ongoing communication and coordination with other systems of care. The treatment plans must be:

- Developed by the member's primary care provider with member participation, and in consultation with any specialists caring for the member;
- Approved by the entity in a timely manner, if this approval is required; and
- In accord with any applicable State quality assurance and utilization review standards<sup>18</sup>

The Federal EQR requires identification, assessment, treatment planning, and access for Medicaid Managed Care Members who have special health care needs (SCHN) as follows:

<sup>18</sup> MC+ Managed Care Compliance Tool, Contract No. B3Z06118, Contract Date: 07/01/06.

- (1) Identification.** The State must implement mechanisms to identify persons with special health care needs to MCOs, PIHPs as those persons are defined by the State. These identification mechanisms must –
- (i) Be specified in the State's quality improvement strategy; and
  - (ii) May use State staff, the State's enrollment broker, or the State's MCOs, PIHPs.
- (2) Assessment.** Each MCO and PIHP must implement mechanisms to assess each Medicaid enrollee identified by the State (through the mechanisms specified in paragraph (c) (1) of this section) and identified to the MCO or PIHP by the State as having special health care needs in order to identify any ongoing special conditions of the enrollee that require a course of treatment or regular care monitoring. The assessment mechanisms must use appropriate health care professionals.
- (3) Treatment plans.** If the State requires MCOs, PIHPs to produce a treatment plan for enrollees with special health care needs who are determined through assessment to need a course of treatment or regular care monitoring, the treatment plan must be:
- (i) Developed by the enrollee's primary care provider with enrollee participation, and in consultation with any specialists caring for the enrollee;
  - (ii) Approved by the MCO or PIHP in a timely manner, if this approval is required by the MCO or PIHP; and
  - (iii) In accord with any applicable State quality assurance and utilization review standards.
- (4) Direct access to specialists.** For enrollees with special health care needs determined through an assessment by appropriate health care professionals (consistent with §438.208(c) (2)) to need a course of treatment or regular care monitoring, each MCO and PIHP must have a mechanism in place to allow enrollees to directly access a specialist (for example, through a standing referral or an approved number of visits) as appropriate for the enrollee's condition and identified needs.<sup>19</sup>

As part of Missouri's 2003 EQR a review of case management records for this special needs population was conducted. It included a review of case management records for MC+ Medicaid Managed Care members in need of behavioral health services. The record review was conducted to identify strengths and weaknesses in the case management process. As part of this EQR a similar review of behavioral health case management records occurred as a follow-up activity. A similar review tool and process was utilized to enable a comparison of current case management practices to those conducted previously, and to serve as a method to maintain the integrity of the follow-up process.

During the 2003 review period each MC+MCO was requested to make five (5) case management records available at the time of the site visit. The records requested were for

<sup>19</sup> Federal Register, Final Rule, Medicaid Managed Care Regulations, 42CFR438, Vol. I, January 1, 2003.

MC+ Medicaid Managed Care members receiving behavioral health services by a psychologist and RN with mental health treatment experience. Across all plans, a total of 34 case management records were reviewed. The files were reviewed using a checklist format based on the state and federal guidelines for case management (see Appendix 12). The findings were aggregated across MC+ MCOs to provide an overview of the extent to which behavioral health case management processes addressed state and federal requirements.

The review criteria utilized looked for the following information:

1. Documentation of member information
2. Reason for case management
3. Identification of provider
4. Documentation of results of assessment of care needs
5. Documentation of treatment plan
6. Objective and measurable treatment goals
7. Documentation of services
8. Documentation of case management activities
9. Documentation of community-based services
10. Documentation of coordination with other entities, particularly the member's PCP<sup>20</sup>

The 2006 behavioral health case management review utilized a random selection of six (6) records from each MC+MCO for a total of thirty-five (six records from Mercy CarePlus, HealthCare USA, Missouri Care, Children's Mercy Family Health Partners, and Blue Advantaged Plus, and 5 records from Harmony Health Plan) based on a submission of a listing that included any member with a diagnosis that indicated a need for behavioral health services. A listing of all members receiving behavioral health services during the fourth quarter of 2006 was requested of each MC+MCO by the State Medicaid Agency (SMA). These lists were imported into SPSS and a random selection of the required number of records occurred. The request from the SMA asked each MC+MCO to "provide a listing of all members who received behavioral health services, a mental health and/or substance abuse diagnosis during the fourth quarter of 2006." Consequently all of the files requested, as a result of the random SPSS selection process, did not include only members who received case management services. The files for members not receiving case management services were reviewed to ensure that the need for behavioral health services was assessed correctly, and that appropriate authorizations occurred. Additionally, each MC+MCO was requested to provide six (6) files that did include case management. Both sets of records were reviewed during the site visit.

<sup>20</sup> 2003 External Quality Review, Report of Findings, Missouri MC+ Managed Care Program.

All behavioral health files were requested on the day of the site review. Each MC+ MCO received a listing of the requested files on the morning of the site visit with a request to have these records available by 1:00 p.m. of the same day. The records to be self-selected by the MC+ MCO were also requested at that time. The review team completed an evaluation of each record against the specified criteria outlined above. The outcome of these reviews was as follows:

1. Documentation of demographic information, including health plan member identifiers, was examined. All necessary information was available in ninety-one percent (91%) of the 35 records reviewed. Date of birth and member identifying information was available in ninety-seven percent (97%) of the records. Information indicating member status was recorded in eighty-five percent (85%) of the records reviewed. Specific benefits were not recorded in the member identifying information. However, the services that were made available were clearly documented in the case narrative and are reflected in the information that follows.
2. The reason for case management was clearly documented in 100% of the cases reviewed. Referral sources were identified. Sources included primary care physicians (PCPs), parents, inpatient providers, as well as self-referral.
3. The behavioral health providers were identified in 97% of the cases reviewed.
4. The results of assessment of care and needs were identified through provider authorization, through testing results, and through narrative statements regarding provider requests and consultations. Although the results of an assessment process could be identified in a number of the cases reviewed, a specific type of assessment and those results were not always described or specified. The results of assessments were included in 83% of the cases reviewed.
5. A specific treatment plan was found in 77% of the cases reviewed. In all of those that included a stated treatment plan, it was appropriate to the conditions described. Some treatment plans included a specific period of time that corresponded to authorizations. Authorizations were extended as needs and provider recommendations indicated.
6. Seventy-one percent (71%) of the records included treatment goals that were objective and measurable.
7. A majority of the cases reviewed (89%) contained documentation of the services provided. These services included inpatient treatment, outpatient therapy – as an initial

- service and as follow-up to inpatient treatment, intensive in-home services, and medication management.
8. Case management activities were recorded in 83% of the records reviewed. Case management activities consisted of extensive follow-up services to members who were in need of behavioral health services. These activities included: contacts with providers; contacts with members to ensure that the services they were receiving were helpful and appropriate; reminders of appointments; offers of assistance with transportation; and coordination between in-patient and out-patient providers. Case managers also made referrals for members and then provided follow-up support to ensure that these referrals were attended and useful.
9. Community-based services were documented in case management notes, or as a specific activity in 51% of the cases reviewed. It should be noted that a number of the cases reviewed were in the early stages of case management and community-based service referrals were not made as the member's situation was not clear or other services were not yet appropriate. In the cases reviewed, where community-based service referrals were made and documented, they were appropriate referrals. In a number of cases, information and referrals were provided to members who declined participation in these services.
10. Coordination with PCPs and between service providers occurred and was recorded 71% of the time.

Case management records reviewed included: documentation of bilingual therapists; coordination with primary care providers; follow-up from in-patient treatment, community-based coordination and referral; utilization management; and documentation of contacts. Limitations noted across case management records for all MC+ MCOs included lack of identification of and communication with PCPs, lack of articulated specifics of the treatment plan, and lack of specific written treatment goals. Treatment plans, developed with the input of the member, were not evident. It was clear that communications had occurred with the members, but engaging their input in the treatment planning process was not documented if it did occur. It was not clear if this was a function of the structure of the case record, or if treatment planning and goal development were lacking at the case management level.

Case management recording has improved and is now capturing activities on a more regular basis. The following table compares the elements of the case review in 2003 to the outcome of the case review for services provided in 2006.

<b>Measurement</b>	<b>2003 %</b>	<b>2006 %</b>	<b>Percent Change</b>
1. Documentation of Member Information	94%	91%	-3%
2. Reason for Case Management	59%	100%	+41%
3. Identification of Behavioral Health Provider	85%	97%	+12%
4. Documentation of Results Of Assessment of Care Needs	47%	83%	+36%
5. Documentation of Treatment Plan	29%	77%	+48%
6. Objective and Measurable Treatment Goals	24%	71%	+47%
7. Documentation of Services	62%	89%	+27%
8. Documentation of Case Management Activities	56%	83%	+27%
9. Documentation of Community-Based Services	12%	51%	+39%
10. Documentation of Coordination with other Entities	15%	71%	+56%

## Conclusion

### Access to Care

Case management activities included ensuring that members had access to the care they needed. Referrals and appointments were made for psychiatric care for treatment and medication management. Case managers worked with hospitals to ensure that members received the correct level of inpatient care. Reviewing case records for members, who in some cases required an extraordinary type of service, revealed that members obtained these services without access issues that were apparent to them.

### **Quality of Care**

In reading the passages in case management notes it is clear that there is attention to the quality of care provided to members. Case manager notes reflect attention to the member needs, and also to ensuring that providers are meeting member service needs. Member services received included both inpatient and outpatient services. Outpatient services received reflected both in-home services, as well as traditional outpatient therapies. Follow-up occurred on a consistent basis to ensure that the services authorized were meeting members' needs and expectations.

### **Timeliness of Care**

Services, related in the case management notes reviewed, indicated that in most cases services were received in a timely manner. In a number of cases, case managers rescheduled appointments for members when they missed visits with therapists and psychiatrists. In several cases a new provider was identified, with the member's approval, which could provide more timely appointments.

### **Recommendations**

1. MC+ MCOs should incorporate the development of treatment planning and goal development into the case management recording process. Actual treatment planning may be the responsibility of the provider. However, goals for case management, or reflecting the direct treatment goals in the case management record would ensure that this requirement is clearly met.
2. MC+ MCOs should include a heading and comment about the need for, completion of, and member response to referrals for community-based services. It appears that this is occurring in some cases, but it is difficult to locate in case management notes.
3. MC+MCO case managers should ensure that language in the case management record reflects true case management activities and is not a repository for Utilization Management/Review information.
4. MC+ MCOs should incorporate a process to record the identity of the member's PCP and contacts with the PCP, who is a member resource.

5. MC+ MCOs should ensure that the information provided in the case management record does record the services provided in a clear and concise manner to ensure that future and ongoing activities are related to the services required by the individual member.

### **QUALITY ASSESSMENT AND PERFORMANCE IMPROVEMENT: ACCESS STANDARDS**

Subpart D of the regulatory provision for Medicaid managed care sets forth 17 regulations governing access to services. These regulations call for: the maintenance of a network of appropriate providers including specialists; the ability to access out-of-network services in certain circumstances; adequate care coordination for enrollees with special healthcare needs; development of a method for authorization of services, within prescribed timeframes; and the ability to access emergency and post-stabilization services. There were no items rated as “Not Met” (see Table 53). Across all MC+ MCOs, 97.65% of the regulations were “Met,” which is a substantial improvement over the rate of 78.99% at the time of the 2005 EQR. Four of the MCOs (Children’s Mercy Family Health Partners, Blue Advantage Plus, HealthCare USA, and Missouri Care) were found to be 100% compliant.

**Table 53 – Subpart D: Quality Assessment and Performance Improvement: Access Standards**

Federal Regulation	MC+ MCO						All MC+ MCOs			
	MCP	Harmony	HCUSA	MOCare	CMFHP	BA+	Number Met	Number Partially Met	Number Not Met	Rate Met
438.206(b)(1)(i-v) Availability of Services: Provider Network	2	na	2	2	2	2	5	0	0	100.0%
438.206 (b) (2) Access to Well Woman Care: Direct Access	2	na	2	2	2	2	5	0	0	100.0%
438.206(b)(3) Second Opinions	2	na	2	2	2	2	5	0	0	100.0%
438.206(b)(4) Out of Network Services: Adequate and Timely Coverage	2	na	2	2	2	2	5	0	0	100.0%
438.206(b)(5) Out of Network Services: Cost Sharing	1	na	2	2	2	2	4	1	0	80.0%
438.206(c)(1)(i-vi) Timely Access	2	na	2	2	2	2	5	0	0	100.0%
438.206(c)(2) Provider Services: Cultural Competency	2	na	2	2	2	2	5	0	0	100.0%
438.208(b) Care Coordination: Primary Care	2	na	2	2	2	2	5	0	0	100.0%
438.208(c)(1) Care Coordination: Identification	2	na	2	2	2	2	5	0	0	100.0%
438.208(c)(2) Care Coordination: Assessment	2	na	2	2	2	2	5	0	0	100.0%
438.208(c)(3) Care Coordination: Treatment Plans	2	na	2	2	2	2	5	0	0	100.0%
438.208(c)(4) Care Coordination: Direct Access to Specialists	2	na	2	2	2	2	5	0	0	100.0%
438.210(b) Authorization of Services	2	na	2	2	2	2	5	0	0	100.0%
438.210(c) Notice of Adverse Action	2	na	2	2	2	2	5	0	0	100.0%
438.210(d) Timeframes for Decisions, Expedited Authorizations	2	na	2	2	2	2	5	0	0	100.0%
438.210(e) Compensation of Utilization Management Activities	2	na	2	2	2	2	5	0	0	100.0%
438.114 Emergency and Post-Stabilization Services	1	na	2	2	2	2	4	1	0	80.0%
Number Met	15		17	17	17	17	83	2	0	97.65%
Number Partially Met	2		0	0	0	0				



All MC+ MCOs had policies and practice that reflected the members' right to a second opinion and a third opinion if the first two disagreed [438.206(b)(3)]. Another area where all MC+ MCOs were 100% compliant was in provider cultural competency. Evidence of this included an MC+ MCO (Mercy Health Plan) who recruited a home health provider who spoke Vietnamese solely for one member. Throughout this review period, all health plans reported incidents where they found providers who were familiar with members' cultural and language needs. Sensitivity to and respect for members' cultural needs was an area where the MC+ MCOs excelled. All MC+ MCOs were fully compliant in having SMA approved notifications of adverse actions [438.210(c)]. There were no identified incidents of incentivizing staff or contractors for utilization management decisions that were in the favor of the MC+ MCOs. All policies and practices in this area [438.210(e)] were compliant.

The area of access to care was a primary focus of improvement for all the MC+ MCOs during 2006. Evidence existed of efforts to inform members of available providers, urgent care centers, and hospitals through presentations at community events and newsletters. Required documentation and approved policies did exist in all areas but one (Mercy CarePlus). Four of the MC+ MCOs (HealthCare USA, Missouri Care, Children's Mercy Family Health Partners, and Blue Advantage Plus) had complete policy and practices, and Provider Manual language in the area of emergency and post-stabilization services [438.114]. One MC+ MCO (Mercy CarePlus) continued to have difficulties in producing approved policy in this area. The MC+ MCO made efforts to ensure that the problems they experienced did not affect services to members. All MC+ MCOs provided evidence of strong relationships with their providers and maintained strong communication with them particularly in solving member service problems.

The MC+ MCOs made a concerted effort to ensure that members had appropriate and timely access to services. They continued to express concern over the shortage of specialists in the areas of orthopedic surgery, pediatric neurology, rheumatology, and

child/adolescent psychiatrists. All MC+ MCOs reported utilizing out-of-network providers and often paying commercial or higher rates to obtain these services. One MC+ MCO (Children's Mercy Family Health Partners) had a number of specialists who requested that they not be included on the MC+ MCO's published network, but readily agreed to service members, when requested, at the MC+ Medicaid Managed Care rate. A number of the MC+ MCOs (HealthCare USA, Missouri Care) continued to partner with teaching hospitals in their Regions, in order to increase their available surgical and specialist capacity. All MC+ MCOs had an internal system that could provide specialist services, even in specialties that were normally difficult to access, when required to meet members' healthcare needs.

All MC+ MCOs exhibited a deep commitment to delivering and providing oversight of behavioral health services. One MC+ MCO (Missouri Care) no longer uses a subcontracted network for behavioral health. This MC+ MCO recognized a number of advantages in directly supervising the provision of behavioral health services. They contracted with the majority of the active providers previously utilized by the subcontractor. They were able to recruit additional providers through the use of solo practices, particularly those who provided in-home treatment services. They maintained the same toll-free telephone number for member access, and conducted provider training. Some of the benefits identified included: reducing the use of inpatient treatment; more timely and complete prior authorizations; and improved case management, particularly for members who require both physical and mental health treatment. They did experience some difficulties in motivating the smaller providers to comply with timely claims submission requirements, but through training are seeing improvements in this area.

**QUALITY ASSESSMENT AND PERFORMANCE IMPROVEMENT: STRUCTURE AND OPERATION STANDARDS**

There are 10 Structure and Operations Standards for ensuring compliance with State policies and procedures for the selection and retention of providers, disenrollment of members, and accountability for activities delegated to subcontractors. There were no items across MC+ MCOs that were rated as “Not Met.” Across MC+ MCOs, 98% of the regulations were “Met,” which is an improvement over the rating of 88.6% from the 2005 EQR (see Table 54).

**Table 54 – Subpart D: Quality Assessment and Performance Improvement: Structure and Operation Standards**

Federal Regulation	MC+ MCO						All MC+ MCOs			
	CCP	Harmony	HCUSA	MOCare	CMFHP	BA+	Number Met	Number Partially Met	Number Not Met	Rate Met
438.214(a,b) Provider Selection: Credentialing/Recredentialing	1	na	2	2	2	2	4	1	0	80.0%
438.214(c) and 438.12 Provider Selection: Nondiscrimination	2	na	2	2	2	2	5	0	0	100.0%
438.214(d) Provider Selection: Excluded Providers	2	na	2	2	2	2	5	0	0	100.0%
438.214(e) Provider Selection: State Requirements	2	na	2	2	2	2	5	0	0	100.0%
438.226 and 438.56(b)(1-3) Disenrollment: Requirements and limitations	2	na	2	2	2	2	5	0	0	100.0%
438.56(c) Disenrollment Requested by the Enrollee	2	na	2	2	2	2	5	0	0	100.0%
438.56(d) Disenrollment: Procedures	2	na	2	2	2	2	5	0	0	100.0%
438.56(e) Disenrollment: Timeframes	2	na	2	2	2	2	5	0	0	100.0%
438.228 Grievance System	2	na	2	2	2	2	5	0	0	100.0%
438.230(a,b) Subcontractual Relationships and Delegation	2	na	2	2	2	2	5	0	0	100.0%
Number Met	9		10	10	10	10	49	1	0	98.0%
Number Partially Met	1		0	0	0	0				
Number Not Met	0		0	0	0	0				
Rate Met	90.0%		100.0%	100.0%	100.0%	100.0%				

Note: 0 = Not Met; 1 = Partially Met ; 2 = Met

Sources: Department of Health and Human Services Centers for Medicare & Medicaid Services (2003). Monitoring Medicaid Managed Care Organizations (MCOs) and Prepaid Inpatient Health Plans (PIHPs): A protocol for determining compliance with Medicaid Managed Care Proposed Regulations at 42 CFR Parts 400, 430, et al. Final Protocol Version 1.0, BHC, Inc., 2004 External Quality Review Monitoring MCOs Protocols.



The Provider Services departments of all MC+ MCOs exhibited a sound and thorough understanding of the requirements for provider selection, credentialing, nondiscrimination, exclusion, and MC+ Medicaid Managed Care requirements. Four of the MC+ MCOs (Children's Mercy Family Health Partners, Blue Advantage Plus, Missouri Care, and HealthCare USA) were 100% compliant with all regulations. The final MC+ MCO (Mercy CarePlus) met 90% of the regulations. Nine of the individual regulations were 100% met. This included Provider Selection [438.214(d) and 438.214(e)]. The staff at each MC+ MCO understood the requirements for disenrollment. They were 100% "Met" for the applicable regulations for timeframes [438.56(e)]. All MC+ MCOs met all regulations for disenrollment procedures. All MC+ MCOs (100%) had appropriate grievance systems in place that met the requirements of this regulation [438.228]. Two of the MC+ MCOs (HealthCare USA, and Blue Advantage Plus) described credentialing and recredentialing policies that exceeded the requirements of the regulations. Providers were willing to submit to these stricter standards to maintain network qualifications in both the MC+ MCO and commercial networks of these MC+ MCOs. Overall, four of five (80%) of the MC+ MCOs had all required policies and practices in place regarding credentialing. One MC+ MCO (Mercy CarePlus) continued to have outstanding policy in the area of credentialing.

All MC+ MCOs understood the required oversight of subcontractors. The compliance rate for this regulation [438.230(a,b)] improved from the 2005 rate of 71.4%, to the 2006 rate of 100%.

All previous deficiencies for Structure and Operation Standards related to a lack of submitted or approved policies or subcontractor agreements. The MC+ MCOs exhibited a significantly improved understanding and attention to these details and requirements during this review.

**QUALITY ASSESSMENT AND PERFORMANCE IMPROVEMENT: MEASUREMENT AND IMPROVEMENT**

There are 12 Measurement and Improvement Standards addressing the selection, dissemination, and adherence to practice guidelines; the implementation of performance improvement projects; the calculation of performance measures; the evaluation of the availability of services and assessment techniques for enrollees with special healthcare needs; and the maintenance of information systems that can be effectively used to examine service utilization, grievances and appeals, and disenrollment. All items were either “Met” or “Partially Met” for compliance with Measurement and Improvement (see Table 55). A total of 98% of the criteria were “Met” by the MC+ MCOs, which continues to indicate improvement in meeting federal requirements, over the 2005 rate of 83.1%. Four MC+ MCOs (Missouri Care, Children’s Mercy Family Health Partners, HealthCare USA, and Blue Advantage Plus) met all the requirements (100%) in this area.

**Table 55 – Subpart D: Quality Assessment and Performance Improvement: Measurement and Improvement**

Federal Regulation	MC+ MCO						All MC+ MCOs			
	MCP	Harmony	HCUSA	MOCare	CMFHP	BA+	Number Met	Number Partially Met	Number Not Met	Rate Met
438.236(b)(1-4) Practice Guidelines: Adoption	2	na	2	2	2	2	5	0	0	100.0%
438.236(c) Practice Guidelines: Dissemination	2	na	2	2	2	2	5	0	0	100.0%
438.236(d) Practice Guidelines: Application	2	na	2	2	2	2	5	0	0	100.0%
438.240(a)(1) QAPI: General Rules	2	na	2	2	2	2	5	0	0	100.0%
438.240(b)(1) and 438.240(d) QAPI: Basic Elements of MCO Quality Improvement and PIPs	2	na	2	2	2	2	5	0	0	100.0%
438.240(b)(2)(c) and 438.204(c) QAPI: Performance Measurement	1	na	2	2	2	2	4	1	0	80.0%
438.240(b)(3) QAPI: Basic Elements/Over and Under Utilization	2	na	2	2	2	2	5	0	0	100.0%
438.240(b)(4) QAPI: Basic Elements regarding Special Healthcare Needs	2	na	2	2	2	2	5	0	0	100.0%
438.240(e) QAPI: Program Review by State	NA	na	NA	NA	NA	NA	NA	NA	NA	NA
438.242(a) Health Information Systems	2	na	2	2	2	2	5	0	0	100.0%
438.242(b)(1,2) Health Information Systems: Basic Elements	2	na	2	2	2	2	5	0	0	100.0%
438.242(b)(3) Health Information Systems: Basic Elements	2	na	2	2	2	2	5	0	0	100.0%
Number Met	10		11	11	11	11	54	1	0	98.2%
Number Partially Met	1		0	0	0	0				
Number Not Met	0		0	0	0	0				
Rate Met	90.9%		100.0%	100.0%	100.0%	100.0%				

Note: Regulation 438.240(e) refers to program review by the state. The regulation requires the state to review, at least annually, the impact and effectiveness of each MCO's quality assessment and performance improvement program. The regulation refers to the state QA & I program review process and is not applicable to External Quality Review of the MC+ Managed Care Program. This percent is calculated for the regulations that are applicable tot the MC+ Managed Care Program.

0 = Not Met; 1 = Partially Met ; 2 = Met

Sources: Department of Health and Human Services Centers for Medicare & Medicaid Services (2003). Monitoring Medicaid Managed Care Organizations (MCOs) and Prepaid Inpatient Health Plans (PIHPs): A protocol for determining compliance with Medicaid Managed Care Proposed Regulations at 42 CFR Parts 400, 430, et al. Final Protocol Version 1.0.; BHC, Inc., 2004 External Quality Review Monitoring MCOs Protocols.



The area of practice guidelines was problematic for two MC+ MCOs (Mercy CarePlus and HealthCare USA) during the 2005 review. Both had new Medical Directors, who identified resistance on the part of the medical community in the St. Louis area to the acceptance or implementation of practice guidelines. The specific requirements of the regulations were related both MC+ MCO. Both of these MC+ MCOs improved in this area. They have practice guidelines in place and are monitoring providers to ensure their utilization. Currently all of the MC+ MCOs (100%) met all the requirements for adopting, disseminating and applying practice guidelines. In the Western MC+ Medicaid Managed Care region, staff from the MC+ MCOs met with a quality enhancement group in the healthcare community (Kansas City Quality Improvement Consortium). Regional standards and practices were discussed and regionally specific standards, that met or exceeded nationally accepted guidelines, were developed. All MC+ MCOs related that they expected providers to use the practice guidelines combined with their experience and patient knowledge in their decision-making. When conflicts occurred, the Medical Director reviewed the situation and consulted with the provider in an effort to ensure that the services that were provided were in the members' best interested.

All MC+ MCOs (100%) used nationally accredited criteria for utilization management decisions [438.240(b)(3)]. The tools the MC+ MCOs reported using included the InterQual Clinical Decision Support Tool, LOCUS/CALOCUS (Level of Care Utilization System/Child and Adolescent Level of Care Utilization System) for utilization management decisions in the provision of behavioral health services and the Milliman Care Guidelines. These sources provided evidence-based criteria and best practice guidelines for healthcare decision-making. The MC+ MCOs staff was able to articulate how they utilized these tools and apply them to member healthcare management issues. The MC+ MCOs used all information available to them to ensure that evidence-based practice ensuring member safety while controlling medically unnecessary care.

The MC+ MCOs were actively involved in developing and improving their Quality Assessment and Improvement Programs. Two of the MC+ MCOs (Blue Advantage Plus,

Children's Mercy Family Health Partners) utilized community based advisory boards, one of which (Children's Mercy Family Health Partners) included members. These groups assisted the MC+ MCOs in assessing member needs and barriers to services. Both MC+ MCOs utilized the recommendations of these groups in their operations, member information, and daily activities. All MC+ MCOs developed internal systems for monitoring, analysis and evaluation of their own programs. All six (100%) had a program and all required policy and procedures in place to meet the requirements of the federal regulations [438.240(a)(1)].

All MC+ MCOs improved in the section of the protocol involving Validating Performance Improvement Projects, Validating Performance Measures, Validating Encounter Data, and Health Information Systems. Detailed findings and conclusions for these items are provided in previous sections of this report and within the MC+ MCO summaries. One MC+ MCO (Mercy CarePlus) did have approved policy in place regarding the need to utilize approved performance measures. They did not submit data in a format that allowed for the evaluation of all three performance measures to be audited.

## GRIEVANCE SYSTEMS

Subpart F of the regulatory provisions for Medicaid managed care (Grievances and Appeals) sets forth 18 requirements for notice of action in specific language and format requirements for communication with members, providers and subcontractors regarding grievance and appeal procedures and timelines available to enrollees and providers. All MC+ MCOs excelled (100%) in their compliance with the regulations related to grievances and appeals (see Table 56). There were no items rated as "Not Met." All five MC+ MCOs (Mercy CarePlus, HealthCare USA, Children's Mercy Family Health Partners, Missouri Care, and Blue Advantage Plus) were found 100% in completing required policy, procedure, and practice in their Grievance Systems.

**Table 56 – Subpart F: Grievance Systems**

Federal Regulation	MC+ MCO							All MC+ MCOs			
	MCP	Harmony	HCUSA	MOCare	FHP	FG	BA+	Number Met	Number Partially Met	Number Not Met	Rate Met
438.402(d) Grievance and Appeals: General Requirements	2	na	2	2	2	2	2	6	0	0	100.0%
438.402(d)(1) Grievance System: Filing Requirements - Authority	2	na	2	2	2	2	2	6	0	0	100.0%
438.402(d)(2) Grievance System: Filing Requirements - Timing	2	na	2	2	2	2	2	6	0	0	100.0%
438.402(d)(3) Grievance System: Filing Requirements - Procedures	2	na	2	2	2	2	2	6	0	0	100.0%
438.404(a) Grievance System: Notice of Action - Language and Format	2	na	2	2	2	2	2	6	0	0	100.0%
438.404(b) Notice of Action: Content	2	na	2	2	2	2	2	6	0	0	100.0%
438.404(c) Notice of Action: Timing	2	na	2	2	2	2	2	6	0	0	100.0%
438.406(a) Handling or Grievances and Appeals: General Requirements	2	na	2	2	2	2	2	6	0	0	100.0%
438.406(d) Handling or Grievance and Appeals: Special Requirements for Appeals	2	na	2	2	2	2	2	6	0	0	100.0%
438.408(a) Resolution and Notification: Basic Rule	2	na	2	2	2	2	2	6	0	0	100.0%
438.408(b,c) Resolution and Notification: Grievances and Appeals - Timeframes and Extensions	2	na	2	2	2	2	2	6	0	0	100.0%
438.408(d,e) Resolution and Notification: Grievance and Appeals - Format and Content of Notice	2	na	2	2	2	2	2	6	0	0	100.0%
438.408(f) Resolution and Notification: Grievances and Appeals - Requirements for State Fair Hearings	2	na	2	2	2	2	2	6	0	0	100.0%
438.410 Expedited Resolution of Appeals	2	na	2	2	2	2	2	6	0	0	100.0%
438.414 Information about the Grievance System to Providers and Subcontractors	2	na	2	2	2	2	2	6	0	0	100.0%
438.416 Recordkeeping and Reporting Requirements	2	na	2	2	2	2	2	6	0	0	100.0%
438.420 Continuation of Benefits while Appeal/Fair Hearing Pend	2	na	2	2	2	2	2	6	0	0	100.0%
438.424 Effectuation of Reversed Appeal Resolutions	2	na	2	2	2	2	2	6	0	0	100.0%

Grievance and Appeal reports for both members and providers were reviewed from the first quarter of 2006, as submitted to the SMA. The MC+ MCOs reported different numbers and types of concerns. The number of member grievances and appeals varied between the MC+ MCOs. However, the numbers were proportional to MC+ MCO enrollment. Provider complaints, grievances, and appeals also varied but were not disproportional to the provider network.

In analyzing the Grievance System report, the most frequent issues included:

Member - Grievances and Appeals	Provider – Complaints, Grievances, and Appeals
• Transportation	• Authorizations – Denied/Late/None
• Prescription Drug Issues • Appointment Availability/Continuity of Treatment	• Billing Problems • Contractual Issues
• Treatment by Provider/Staff • Service Category/Prior Auth. (denial) • Claims Issue/Uncovered Benefit • Inability to Find PCP/Specialist – or Obtain an Appointment • State Fair Hearing Request	• Untimely Submission of Claims • Uncovered Benefit • Additional Information Required • Medical Necessity Question

The largest number of member grievance/appeals continued to concern transportation issues.

The largest number of provider complaints/grievances/appeals continued to include authorization issues and untimely submission of claims. The majority of the claims were the result of payment disputes, although a number of grievances and appeals filed by providers did dispute decisions that appeared to affect the quality of care received by members.

A random selection of both member grievance and appeals, and provider complaints, grievances, and appeals were identified for on-site review. The random list was presented to each MC+ MCO at the beginning of the on-site review. The results of these reviews were presented during the Exit Interview. The review identified that the MC+ MCOs are maintaining grievance and appeals records in a reviewable format that includes related correspondence and supporting information. Correspondence was sent timely and notices were in the SMA approved format. When delays occurred the MC+ MCO sent written information to the member or provider

explaining the delay. In one case this correspondence was sent, but the required timeframes were met.

There were no deficiencies in the Grievance System policy submission. The MC+ MCOs are diligent in maintaining policies and practices in this area to ensure that these systems are up-to-date and comply with the SMA contract requirements and federal regulations. Appropriate practice for addressing member grievance and appeals, and provider complaints, grievances and appeals appeared to be in place for all MC+ MCOs.

## 5.4 Conclusions

Across all MC+ MCOs there was a substantial improvement in the area of compliance with federal regulations. There were no regulations rated as “Not Met.” All individual regulations were rated as “Met” or “Partially Met.” Four MC+ MCOs were 100% compliant with all requirements. The remaining MC+ MCO was 100% compliant with the regulations related to Grievances; 53.8% compliant with Enrollee Rights and Protections; 88.2% compliant with Access Standards; 90% compliance with Structure and Operations; and 90% compliant with Measurement and Improvement. This indicates significant improvement in becoming compliant with the State SMA contractual requirements and the corresponding federal regulations over the 2005 EQR. All sources of available documentation, interviews, and observations at the on-site review were used to develop the ratings for compliance. The EQRO comments were developed based on review of this documentation and interview responses. Several of the MC+ MCOs made it clear that they used the results of the prior EQR to complete and guide required changes. One MC+ MCO (Mercy CarePlus) significantly improved and stated that they utilized the compliance protocol as a tool to develop their performance and improve services to members. This MC+ MCO achieved improved compliance in every category. The following summarizes the strengths in the areas of Access to Care, Quality of Care and Timeliness of Care. Recommendations are based on the findings utilizing the Protocol for Determining Compliance with Medicaid Managed Care Regulations.

## QUALITY OF CARE

Seven of the 13 regulations for Enrollee Rights and Protections were 100% “Met.”

Communicating MC+ Members’ rights to respect, privacy, and treatment options, as well as communicating, orally and in writing, in their own language or with the provision of interpretive services is an area of strength for all MC+ MCOs. The MC+ MCOs communicated that meeting these requirements with members and providers, created an atmosphere with the expectation of delivering quality healthcare. The MC+ MCOs maintained an awareness of and appropriate responses to cultural and language barriers concerning communication in obtaining healthcare. The MC+ MCOs responded to physical, emotional and cultural barriers experienced by members with diligence and creativity. The MC+ MCOs were aware of their need to provide quality services to members in a timely and effective manner.

Nine of the 10 regulations for Structure and Operations Standards were 100% “Met.” These included provider selection, and network maintenance, subcontractual relationships, credentialing and delegation. The MC+ MCOs had active mechanisms for oversight of all subcontractors in place. All MC+ MCOs improved significantly in compliance with this set of regulations and articulated their understanding that maintaining compliance in this area enabled them to provide quality services to their MC+ Members.

## ACCESS TO CARE

Four of the MC+ MCOs were fully compliant with the 17 federal regulations concerning Access Standards. These included: provider networks; freedom of choice and access to all services; out-of-network services; timely access to care; core coordination; authorization of services; appropriate notifications; timeliness of decisions regarding care and emergency and post-stabilization services. The six MC+ MCOs monitored high risk MC+ Members and had active case management services in place. Each MC+ MCO described measures they used to identify and provide services to MC+ Members who have special healthcare needs. Many of these case management programs exceeded the strict requirements in the MC+ Medicaid Managed Care contract. All six MC+ MCOs could describe efforts to participate in community events and forums to provide education to members regarding the use of PCPs, special programs available, and how to access their PCP and other specialist service providers that might be required.

The MC+ MCOs were crucially aware of their responsibility to provide access to care and services, and to communicate complete information on this topic to their members.

### TIMELINESS OF CARE

Eleven of the 12 regulations for Measurement and Improvement were 100% “Met.” Four of the five MC+ MCOs met all of the regulatory requirements. All five MC+ MCOs adopted, disseminated and applied practice guidelines to ensure sound and timely healthcare services for members. The MC+ MCOs used their health information systems to examine the appropriate utilization of care using national standard guidelines for utilization management. The MC+ MCOs were beginning to utilize the data and demographics in their systems to track and trend information on members to assist in determinations of risk and prevention initiatives. Several MC+ MCOs began using member and community based quality improvement groups to assist in determining barriers to services and methods to improve service delivery. The Provider Service or Relations departments of the MC+ MCOs exhibited a commitment to relationship building, as well as monitoring providers to ensure that all standards of care were met and that good service, decision-making, and sound healthcare practices occurred on behalf of MC+ Members. The MC+ MCOs all provided examples of how these relationships served to ensure that MC+ Members received timely and effective healthcare. The MC+ MCO staff would contact providers directly to make appointments whenever members expressed difficulty in obtaining timely services.

All 18 regulations for Grievance Systems were 100% “Met.” All five of the MC+ MCOs were 100% compliant with the requirements for policy, procedure and practice in the area of Grievance Systems. The MC+ MCOs provided examples of how timely decision-making allowed MC+ Members to obtain their healthcare quickly and in the most appropriate setting. The MC+ MCOs understood that maintaining this system was an essential component to ensuring timely access to healthcare.

MC+ MCOs remained invested in developing programs and providing services beyond the strict obligations of the contracts. Preventive health and screening initiatives exhibited a commitment to providing the best healthcare in the least invasive manner to their MC+ Members.

Partnerships with local universities and medical schools provided opportunities to obtain cutting-edge and occasionally experimental treatment options, which would not otherwise be

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available to MC+ Members. The MC+ MCOs observed that these efforts combined to create a system that allowed members timely access to quality healthcare.

## RECOMMENDATIONS

1. Continue to distribute the completed compliance tools to MC+ MCOs to ensure recognition of the policies and procedures that must be completed and approved to achieve compliance with federal regulations.
2. MC+ MCOs must continue to recognize the need for timely submission of all required policy and procedures. The majority of the MC+ MCOs put a tracking or monitoring system into place to ensure timely submission of documentation requiring annual approval. These systems must be maintained to ensure that this process remains a priority for all MC+ MCOs.
3. MC+ MCOs identified the need for continuing to monitor provider availability in their own networks. Although most MC+ MCOs had the number of primary care physicians (PCPs) and specialists required to operate, they admitted that many of these PCPs had closed panels and would not accept new patients. Ensuring that there is adequate access for all members, including new members, should be a priority for all MC+ MCOs.
4. MC+ MCOs identified improvement in their Quality Assessment and Improvement programs, and how this enhanced their ability to provide adequate and effective services to members. These efforts must be relentlessly continued to ensure that the organizations remain aware of areas for growth and improvement. These efforts ensure that the quality, timeliness and access to care required for member services is maintained at an exceptional level. MC+ MCOs continued to struggle with recruitment of certain specialty physicians.
5. Throughout discussions with MC+ MCOs the lack of orthopedic surgeons, neurosurgeons, rheumatologists, and child/adolescent psychiatrists was identified as a problem. The MC+ MCOs have made accommodations to ensure that members received the services required. Through the use of advance practice nurses, silent physician partners, cooperative agreements with medical schools, and the willingness to reimburse at commercial insurance rates, the MC+ MCOs attempt to ensure that members have access to these services. MC+ MCOs expressed continued concern for improvement in this area.
6. MC+ MCOs identified the need for additional dental providers. Recruitment was largely delegated to subcontractors. Becoming actively involved in recruitment activities would benefit members and improve the quality of and access to care.
7. The use of data for quality improvement purposes and examination of healthcare outcomes was beginning. Continued growth in the utilization of all of the data available to drive healthcare practice and initiatives is required to improve quality and access to care.

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## 6.0 Mercy CarePlus



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The previous sections of the 2006 EQRO report present the purpose and objectives, technical methods, procedures for evaluation, and MCO to MCO comparisons of analyses, findings, and recommendations for each of the protocols based on the aggregate analysis. This section of the EQRO report summarizes MC+ MCO specific methods, procedures, findings, and recommendations for improving the quality, timeliness, and access to care for MC+ Managed Care Members. Please refer to the main report for detailed technical objectives, methods, and presentation of data that are referenced here for the MC+ MCO.

## 6.1 Performance Improvement Projects

### METHODS

#### Document Review

In 2005 the previous MC+ MCO, Community Care Plus, supplied documentation for review of the Performance Improvement Project 2005: Emergency Room Utilization. In 2006 the MC+ MCO, Mercy CarePlus, which includes staff and functions of Community CarePlus, submitted documentation for Emergency Room Utilization for Asthma-Related Diagnoses for 5-18 Year Olds at Cardinal Glennon Hospital as their non-clinical performance improvement project. They also submitted the final version of the study Early Intervention in Prenatal Case Management and the Relationship to Very Low Birth Weight Babies as their clinical performance improvement project. This review includes information indicating whether or not the re-evaluation of these Performance Improvement Projects provides any trends in:

- improvement rates for the studies;
- improvement in satisfaction; or
- overall improvement in member services.

#### Interviews

Interviews were conducted with the project leaders for each Performance Improvement Project (PIP) by the EQRO team on July 24, 2007 during the on-site review, and included the following:

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Marcia Albridge – Director, Business Development  
Dr. Robert Profumo – Medical Director  
Jennifer Goedeke – Manager/Quality Improvement

The interviewees shared information on the validation methods, study design, and findings. Technical assistance regarding study design and presentation of findings was provided by the EQRO. The following questions were addressed:

- Who was the Project Leader?
- How was the topic identified?
- How was the study question determined?
- What were the findings?
- What was the intervention?
- What was the time period of the study?
- Was the intervention effective?
- What does Mercy CarePlus want to study or learn from their PIPs?

Due to the changes in the PIP the MCO was not able to present enough evidence to provide an adequate validation of the findings.

## FINDINGS

Mercy CarePlus submitted both clinical and non-clinical Performance Improvement Projects (PIP) for evaluation. The title of the non-clinical PIP submitted is Emergency Room Utilization for Asthma-Related diagnoses for 5-18 year olds at Cardinal Glennon Hospital. This project grew from the previous PIP looking at overall emergency room utilization.

The original PIP, “Emergency Room Utilization (Children Receiving Emergency Room Services at Cardinal Glennon Hospital)” was evaluated during the 2005 EQR. The focus of this study was unclear because there are two stated topics. The original study was designed to improve the incidents of emergency room visits at one St. Louis area children’s hospital. Beginning in October 2005, the study was narrowed to address “Emergency Room Utilization for Asthma-Related diagnoses for Children 5 – 18 years at Cardinal Glennon Hospital.” The study question for the second topic is: “Does education following emergency room visits for asthma increase the member’s quality of health by decreasing emergency medical interventions?” The narrative defines why this issue was identified for improvement. It does include several references from the MCO’s literature review. In the information provided in 2007, the rational and justification for narrowing this topic, and for choosing one facility for tracking and analysis was clarified in the study narrative. The population was identified in the topic description and included all MC+ member children age 5-18 that present to the emergency room for asthma related matters.

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There was no sampling conducted. The study population focused on members with special health care needs. In reviewing the data and documentation provided there was a question about the MC+MCO categorization of this project. It was originally identified as clinical. However, based on the methodology presented and the information used to evaluate the findings, this PIP is being considered non-clinical in nature.

The hypothesis of the narrowed study is:

- By educating members following emergency room visits for asthma, Mercy CarePlus believes a member's quality of life will increase because there is a decrease of emergency medical interventions.

The objective of the study is to reduce the number of emergency room visits for Cardinal Glennon Children's Hospital for children ages 5-18. The definition of this objective is not clearly identified. The narrative references children in the ICU and then discusses the use of pharmacy data to identify study subjects. The narrative identified an ER report generated by the hospital that was previously used to identify members. Specific clear measurable indicators and how information between the two reports is coordinated was not discussed. The lack of clarity in defining the study indicators makes it difficult to assess how success is measured. The PIP does not indicate how ER visits are tracked by member, or how members are tracked to identify a recurrence of ER visits. It does not indicate how new members or new ER visits are identified. The narrative does not specify an outcome relationship and requires more detail.

The interventions described in the study include:

- Letters mailed from the pharmacy provider to members identified through pharmacy data regarding program introduction and brochure
- Contact from Express Scripts with the PCP
- Contract with Express Scripts to provide "Asthma Case Management"
- Monthly contacts (undefined);
- Notification of PCP, by the nurse line, if a member is directed to the emergency room; and
- Any member admitted to ICU for asthma enters into case management.

It is difficult to determine the effectiveness of the interventions to date. The study did include a detailed methodology for retrieving demographic and other pertinent data. The study explained the sources for this data, although it is difficult to determine their reliability. The sources include claims data and a daily ER report sheet received from Cardinal Glennon Children's Hospital. The narrative explains that use of the ER report was discontinued in October 2006.

This occurred as the result of MCO Quality Improvement Committee recommendations. The narrative states that “Cardinal Glennon was the focus of the study being the main pediatric hospital where most members seek treatment.” There is no data supporting this assertion. Mercy CarePlus now serves all three MC+ regions.

There is no data presented that supports the claim that Cardinal Glennon Hospital will yield the most information due to the volume of children seen there over other hospitals in this region. There is also no data to support why one hospital is chosen over an aggregate of all the hospitals in the region.

There was no prospective data analysis plan identified in the narrative. The specific data to be collected is not explained. Diagrams and graphs are presented. However, how the information is pertinent to the anticipated outcomes is never explained. Data sources are defined, but it is difficult to assure that complete and accurate data will be collected. Charts include information on ER visits for asthma, how members are referred, times of day that members are seen, and days of the week members go to the ER. How any of these are related to the hypotheses or how this information relates to anticipated outcomes is not described.

It appears that reasonable interventions are planned, but this is not supported in the details of the narrative provided. The revised study question was only in place for three months during 2006. This did not allow for meaningful analysis of the information presented in the plan. With maturity, a detailed explanation of how the data collected will be used, what the expected outcomes of the planned interventions are, and how these interventions improved health care services for members, the study has potential for real and sustained improvement. At this time there is not enough information, description, data, or analysis available to make any judgment about anticipated outcomes.

The second PIP evaluated was the clinical submission entitled, “Early Intervention in Prenatal Care Management and the Relationship to the Very Low Birth Weight Babies.” This project asked if increased rates of obstetrical case management would affect birth outcomes. The study specifically sought to assess whether increased rates of case management would lead to decreases in the incidence of very low birth weight babies. Low birth weight was defined as babies weighing less than 2500 grams, very low birth weight babies were defined as weighing less

than 1500 grams, and extremely low birth weight was defined as babies weighing less than 1000 grams at birth. The steps taken by Mercy CarePlus included early intervention and implementation of case management for all pregnant members. The goal was to increase members' access to prenatal care in an effort to ensure all appropriate health care was received thereby reducing the incidence of low, very low, and extremely low birth weight deliveries. The MCO found that national trends indicated an increase in very low birth weight deliveries. In the original study Mercy CarePlus's stated goal was for their trend data to remain flat, however, the goal was expanded to seek to reduce the number of "at risk" births.

The study question was defined. The rationale for the study, including the background information utilized to support the decision to select this topic, was not identified. Additional information on the literature review used to support the choice of a study topic would have supported the decision to undertake this issue and justified the intervention chosen. The original goal to "remain flat" did not appear to have a significant impact on the identified population. With the expanded goal of decreasing the rate of low birth weights the study promised to have a more profound impact of the population served. The population was defined to include any MC+ member who was pregnant. Members to be included in the study were to be identified by the following methods of notification:

- Pregnancy Risk Screening Forms
- Baseline Health Assessment
- Hospital Admissions and Observations
- Welcome Calls
- OB Provider Referrals

The study indicators did provide for early identification of members who were pregnant and early implementation of case management services. The study did include levels of risk, which determined the intensity of case management services. A Pregnancy Risk Screening tool was used to assist in appropriately identifying members. The entire case management intervention was well described. The stated decision-making process for determining the level of care was "clinical and past experience." This methodology was described in detail providing confidence in the decision-making criteria to determine risk. As the study matured, appropriate changes were made to increase the effectiveness of the interventions. During the first six months of 2005 Mercy CarePlus case-managed high risk pregnancies. Throughout the remainder of the study year, all pregnancies were case-managed. More significant outcomes were found as the result of this added component.

The data collected was reflected on the graphs and tables presented in the study. However, the narrative does not describe a data collection plan. There is no explanation of the process utilized to collect data nor was there an explanation of the measurement cycles. Additional information is needed to define causes and variables that may impact the expected outcomes. The information provided does not adequately justify or explain what factors led to the interventions chosen and how their effectiveness will be measured. During the period in which this study was in process the MC+MCO experienced a merger with another MC+MCO. The effect of adding members and other variables that occurred as the result of this merger were not discussed in the narrative documentation provided.

The study information did clearly define the sources used to collect data. The narrative provided did not specify a systematic method for valid and reliable data collection. Additional information would have assisted the EQRO in determining whether consistent and accurate data was collected throughout the study period. Pre and post-intervention analysis would have assisted in determining the validity and effectiveness of the intervention over time. The study did provide a baseline and two additional years' statistics. Conclusions were drawn from the data presented. The study asserted that the increased case management could be considered an effective intervention based on the decrease in low, very low and extremely low birth weights. Information was not provided that defended this conclusion. However, it should be noted that the data presented appeared to provide evidence that the study did result in credible and interpretable findings.

The stated goal of this study was to achieve a decrease in the incidences of very low birth weight infants. Initially the study did not indicate that it would measure any variable factors, such as increased or decreased number of pregnancies, the increased or decreased number of members obtaining case management, or the influence of earlier determination of risk for the pregnant women. The improved study that began in June 2005 does include some of this information. The study continued during 2006 through May 2007. The outcomes were evaluated over this time period. The planned interventions did appear to have a positive impact on MC+ Members. Additional narrative discussing the impact of variables and defending the outcome of the study are crucial to be able to draw an informed conclusion of the impact of the

study interventions. It should be noted, however, that it does appear from the presentation available that positive outcomes did occur.

## **Conclusions**

### **QUALITY OF CARE**

The best care in the most appropriate environment is the stated focus of the first PIP. The interventions attempted to incorporate methods to ensure that members sought services in a timely and preventive manner, which would improve the quality of their lives as well as of the care received.

As an overarching issue, it was evident during the on-site discussions that the MC+MCO maintains a commitment to utilizing the PIP process. The MC+MCO plans to incorporate positive outcomes from the PIP into organizational operations. They articulate plans to use the PIP process to assist in program enhancement and organizational development in an effort to improve member services.

In the second PIP, the MC+MCO sought to not only enhance the care pregnant women received, but also the quality of life for newborns, whose mothers received sound prenatal services. The pregnant women served received a variety of services that they may never have been aware of if they did not have access to the additional case management provided. The outcomes of the pregnancies followed during this period led to a decrease in the number of low, very low, and extremely low birth weights. The MC+MCO asserts that giving newborns a healthier start will enable improved outcomes in the quality of their lives. The narrative did not provide information about the on-going nature of this enhanced case management process. Interviews with MC+MCO staff indicate that this is now a part of agency operations.

### **ACCESS TO CARE**

The focus of the first PIP is not specifically access to care. However, the intention of the interventions was to ensure that members' have the best care in the best environment. By ensuring that members are aware of their PCP and the services available in the office setting, rather than in an emergency room, they will be able to chose to receive care in a more appropriate environment. Through consistent follow-up with the members' PCPs another level of education is provided that opens access to individuals.

The second PIP did enable members to have early access to prenatal care. Using the case management process as early in members' pregnancy as possible provided the opportunity to inform members of all the services available to them, and to ensure that they had access to the provider of their choice whenever possible. When members were identified as "high risk," access to in-home as well as obstetrical care created additional access to a broad variety of supportive services. This PIP created an environment for fundamental preventive services by enhancing members' access to early and adequate healthcare.

### TIMELINESS OF CARE

The educational efforts of the first PIP were implemented to encourage members to obtain the most timely and effective care possible. Members receiving treatment and medication to improve the management of asthma, rather than waiting until a crisis occurs and emergency room treatment is necessary are much better served. In the second PIP the issue of timeliness is in the forefront of the case management efforts provided. The MC+MCO made significant efforts to ensure that member obtained necessary medical services at early stages of pregnancy ensuring the increased number healthy births experienced.

### RECOMMENDATIONS

1. The study design of Performance Improvement Projects should link the questions, the interventions, and the proposed outcomes to determine whether or not an intervention was effective. This can be accomplished by developing a logic model for the PIPs at the planning stage, and ensuring that adequate narrative accompanies the data and information presented to make all necessary connections.
2. Quarterly measurement should be utilized if at all possible. This will provide information on the ongoing effects of the planned program. Data analysis should incorporate methods to ensure that any resulting change, or lack of change, was related to the intervention.
3. Provide enough narrative to ensure that the reader understands the problem, the proposed interventions, the goals and outcomes hoped for, and how the data presented relates to all these issues and either supports program improvement, or is not effective. Narrative should also be provided to defend the conclusions and defined outcomes of the study. This will provide justification, particularly if the process is to be an ongoing change in the MC+MCO operations.

## 6.2 Validation of Performance Measures

### METHODS

This section describes the documents, data, and persons interviewed for the Validation of Performance Measures for Mercy CarePlus. Mercy CarePlus submitted the requested documents on January 12, 2007. The EQRO reviewed documentation between January 13, 2007 and May 1, 2007. On-site review time was used to conduct follow-up questions and provide feedback and recommendations regarding the performance measure rate calculation.

### Document Review

The following are the documents reviewed by the EQRO:

- The Baseline Assessment Tool (BAT) submitted by Mercy CarePlus (prepared by Novasys)
- Information Systems Capabilities Assessment (ISCA) submitted by Mercy CarePlus
- Healthcare Research Associates' (HRA) HEDIS 2006 Compliance Audit Report
- Novasys Health Network, LLC, policies and procedures related to the HEDIS rate calculation process.
- Novasys Health Network, Mercy CarePlus electronic eligibility process
- Data files from the HEDIS repository containing eligible population, numerators and denominators for each of the three measures
- Decision rules & queries in the HEDIS 2006 repository used to identify eligible population, numerators and denominators for each of the three measures
- Query result files from the repository

The following are the data files submitted by Mercy CarePlus for review by the EQRO:

- PPC DENOMINATOR ANDNUMERATOR DATA.txt
- PPC ENROLLMENT DATA.txt
- WCV3-6 DENOMINATOR AND NUMERATOR DATA.txt
- W34 ENROLLMENT DATA.txt
- FUH DENOMINATOR AND NUMERATOR DATA.xls
- FUH DENOMINATOR AND NUMERATOR nonservdates.xls

The Information Systems Capabilities Assessment (ISCA) review was conducted by the EQRO according to Appendix Z of the Validating Performance Measures protocol. The EQRO Project Director and Research Analyst reviewed all ISCA information provided by the plan. Follow-up reviews were conducted with Mercy CarePlus staff during on site reviews. The review of MCP focused on MCP's ability to accurately report Medicaid data as required by State and Federal regulation. To fulfill its obligations as a Medicaid contractor, MCP must demonstrate that it has the automated systems, management practices, data control procedures and rate calculation procedures required in place to assure that the data is adequately captured, stored, translated, analyzed, and reported.

The EQRO found that Mercy CarePlus' Information Systems (IS): 1) contained complete and accurate encounter data, as specifically detailed in MCP's Validation of Encounter Data section (Section 6.3) of this report; 2) correctly calculated the performance measures reviewed, as specifically detailed below in this Validation of Performance Measure section of the report; 3) contributed to MCP's ability to conduct quality assessment and improvement initiatives, as specifically detailed in MCP's Compliance with Managed Care Regulations section of this report (Section 6.4); and 4) allowed MCP to oversee and manage the delivery of health care to its enrollees, as specifically detailed below in the Conclusions subsection of this section (Section 6.2) of the report.

## Interviews

The EQRO conducted on-site interviews with Cathy Mocca, Quality Improvement Coordinator and Michael Boone (representing Novasys) on Tuesday, July 17, 2007. Michael Boone of Novasys was responsible for calculating the HEDIS 2005 performance measures.

## FINDINGS

Mercy CarePlus calculated the Prenatal and Postpartum Care measure using the Hybrid Method. The Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life and Follow-up After Hospitalization measures were calculated using the Administrative Method. MCO to MCO comparisons of the rates of Prenatal and Postpartum Care, Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life, and Follow-Up After Hospitalization for Mental Illness were conducted using two-tailed z-tests. For comparisons that were statistically significant at the 95% confidence interval (CI), the z-score (z), the upper and lower confidence intervals (CI), and the significance levels ( $p < .05$ ) are reported.

The HEDIS 2006 rate for Follow-Up After Hospitalization measure is reported as two rates, one for 7-day follow-up and one for 30-day follow-up. The Follow-Up After Hospitalization rate reported to the SMA and the State Public Health Agency (SPHA) by Mercy CarePlus was 25.30% (7-day rate) and 49.10% (30-day rate). The 7-day rate reported was consistent with the statewide rate for all MC+ MCOs (31.16%;  $z = -0.62$ ; 95% CI: 14.05%, 35.07%;  $p < .05$ ). The 30-day rate reported was significantly lower than the statewide rate for all MC+ MCOs (52.92%;  $z = -0.73$ ; 95% CI: 40.67%, 61.09%;  $p < .05$ ).

The HEDIS 2006 rate for Mercy CarePlus for the Well-Child Visits measure was 55.80%, which was consistent with the statewide rate for all MC+ MCOs (58.23%;  $z = -0.82$ , statewide 95% CI: 49.70%, 61.91%;  $p < .05$ ).

The 2006 HEDIS rate for the Prenatal and Postpartum Care measure is reported as two rates, one for Timeliness of Prenatal Care and one for Postpartum Care. The reported rate for Mercy CarePlus for the Prenatal Care rate was 64.72%; consistent with the statewide rate for MC+ MCOs (53.30%,  $z = 0.03$ ; 95% CI: 27.40%, 58.24%;  $p < .05$ ). The reported rate for Postpartum Care was 52.07%; consistent with the statewide rate for MC+ MCOs (44.54%,  $z = -0.22$ ; 95% CI: 24.97%, 55.81%;  $p < .05$ ).

The following sections summarize the findings of the process for validating each of the performance measures in accordance with the Validating Performance Measures Protocol. The findings from all review activities are presented according to the EQRO validation activity, with the findings for each measure discussed within the activities as appropriate. Please refer to the tables in the main report for activities, ratings, and comments related to the [CMS Protocol](#) [Validating Performance Measures Attachments](#).

## **Data Integration and Control**

Information systems management policies and procedures for rate calculation were evaluated consistent with the Validating Performance Measures Protocol. This included both manual and automatic processes of information collection, storing, analyzing and reporting. The EQRO was provided with a demonstration of the HEDIS repository. This was done through a remote connection from the Mercy CarePlus location in St. Louis to the vendor's system in Little Rock, Arkansas.

For all three measures, Mercy CarePlus was found to meet most of the criteria for having procedures in place to produce complete and accurate data (see CMS Protocol Validating Performance Measures Attachment V: Data Integration and Control Findings). There were no biases or errors found in the manner in which Mercy CarePlus transferred data into the repository used for calculating the HEDIS 2006 measures.

## Documentation of Data and Processes

Data and processes used for the calculation of measures were adequate (see CMS Protocol Validating Performance Measures Attachment VII: Data and Processes Used to Calculate and Report Performance Measures). Mercy CarePlus met nearly all criteria that applied for all three measures. The two criteria that were not met involved the use of statistical significance testing to document changes in performance over time and using this information to support claims of improvement or stability in performance over time. Although many auditors conduct statistical tests to examine various aspects of data validity, such tests should be used by the MCO to assess the significance of change related to quality improvement activities and operational changes.

## Processes Used to Produce Denominators

Mercy CarePlus met all criteria for the processes employed to produce the denominators of all three performance measures (see CMS Protocol Validating Performance Measures Attachment X: Denominator Validation Findings). This involved the selection of members eligible for the services being measured.

For the Follow-Up After Hospitalization measure, a total of 454 eligible members were reported and validated by the EQRO. A total of 169 records for this measure were excluded by the MCO due to contra-indications identified through administrative data.

The Well-Child Visits measure contained an eligible population of 5,555. The EQRO found the age ranges, dates of enrollment, medical events, and continuous enrollment criteria were programmed to include only those members who met HEDIS 2006 criteria.

Four hundred eleven (411) sampled members were reported and validated for the Prenatal and Postpartum Care measure.

## Processes Used to Produce Numerators

All three measures included the appropriate administrative data ranges for the qualifying events (e.g., prenatal or postpartum visits, well-care visits, and follow-up visits) as specified by the HEDIS 2006 criteria (see CMS Protocol Validating Performance Measures Attachment XIII:

Numerator Validation Findings). Medical record reviews were conducted for the Prenatal and Postpartum Care measure.

The Follow-Up After Hospitalization for Mental Illness measure 7-day rate contained a total of 72 administrative numerator events reported, 70 of which were able to be validated by the EQRO. The final rate calculated by the EQRO was 24.56%, an overestimate by the MCO of 0.74%. For the 30-day follow-up rates, the EQRO validated 145 hits (a final rate of 50.88%); Mercy CarePlus reported 140 hits (reported rate of 49.10%), an underestimate of 1.78% by the MCO when reporting this measure.

For the Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life measure, there were a total of 3,100 administrative hits found in the data file; the MCO reported a total of 3,100 hits. Thus, the rate validated by the EQRO and the rate reported for this measure were the same (55.81%), resulting in no bias.

For the Prenatal and Postpartum Care measure, the EQRO validated 176 of 176 reported prenatal hits and 166 of 166 reported postpartum hits. Mercy CarePlus reported 90 prenatal hits and 48 postpartum hits found through medical record review. However, the EQRO was unable to request a sample of medical records from Mercy CarePlus. The MCO submitted the incorrect data file for the medical record review portion of this measure. The EQRO was therefore unable to select an appropriate sample of medical records for validation, and validated 0 of 90 prenatal medical record hits and 0 of 48 postpartum medical record hits. The overall prenatal rate validated by the EQRO was 42.82%; this resulted in a 21.90% estimated bias (overestimate) by Mercy CarePlus. The postpartum rate validated by the EQRO was 40.39%, an 11.68% overestimate.

### **Sampling Procedures for Hybrid Methods**

The Hybrid Method was used for the Prenatal and Postpartum measure. [CMS Protocol Validating Performance Measures Attachment XII](#); Impact of Medical Record Review Findings and [CMS Protocol Validating Performance Measures Attachment XV](#): Sampling Validation Findings were completed for this measure. Mercy CarePlus employed a 10% oversampling rate for a final sample size (FSS) of 453, which is within specified parameters.

## Submission of Measures to the State

Mercy CarePlus submitted the DST for each of the three measures validated to the SPHA (the Missouri Department of Health and Senior Services; DHSS) in accordance with the Code of State Regulations (19 CSR §10-5.010 Monitoring Health Maintenance Organizations) and the SMA Quality Improvement Strategy.

## Determination of Validation Findings and Calculation of Bias

The following table summarizes the estimates of bias and the direction of the bias. There was no bias found for the Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life measure. The 7 day rate for the Follow-Up After Hospitalization measure was slightly overestimated; the 30 day rate was slightly underestimated. However, both were within the 95% confidence interval for the rates reported by the MCO. Both the Prenatal and Postpartum rates for the Prenatal and Postpartum Care measure were overestimated and outside the 95% confidence intervals reported by the MCO. This is likely due to the fact that medical records could not be validated by the EQRO as discussed above (see the Processes Used to Produce Numerators section).

**Table 57 - Estimate of Bias in Reporting of HEDIS 2006 Measures**

Measure	Estimate of Bias	Direction of Estimate
Well-Child Visits in Third, Fourth, Fifth and Sixth Years of Life	none	
Follow- Up After Hospitalization (7 days)	0.74%	Overestimate
Follow-Up After Hospitalization (30 days)	-1.78%	Underestimate
Prenatal and Postpartum Care (Prenatal)	21.90%	Overestimate
Prenatal and Postpartum Care (Postpartum)	11.68%	Overestimate

## Final Audit Rating

The Final Audit Rating for each of the performance measures was based on the findings from all data sources summarized in the Final Performance Measure Validation Worksheet for each measure. Table 58 (see below) shows that the Prenatal and Postpartum Care measure was not valid due to the validated rate falling below the 95% lower confidence limit reported by Mercy CarePlus.

**Table 58 - Final Audit Rating for Performance Measures**

Measure	Final Audit Rating
Well-Child Visits in Third, Fourth, Fifth and Sixth Years of Life	Fully Compliant
Follow- Up After Hospitalization (7 days)	Substantially Compliant
Follow-Up After Hospitalization (30 days)	Substantially Compliant
Prenatal and Postpartum Care (Prenatal)	Not Valid
Prenatal and Postpartum Care (Postpartum)	Not Valid

**Note:** Fully Compliant = Measure was fully compliant with State specifications; Substantially Compliant = Measure was substantially compliant with State specifications and had only minor deviations that did not significantly bias the reported rate; A significant bias in the rate was defined as a number calculated by the EQRO that fell outside the 95% confidence interval of the rate reported by the MCO. Not Valid = Measure deviated from State specifications such that the reported rate was significantly biased. This designation is also assigned to measures for which no rate was reported; Not Applicable = No MC+ Members qualified for the measure.

## CONCLUSIONS

All of Mercy CarePlus's performance measure reported rates were consistent with the average for all MC+ MCOs.

## QUALITY OF CARE

Mercy Care Plus's calculation of the HEDIS 2006 Follow-Up After Hospitalization for Mental Illness measure was substantially complaint with specifications. This measure is categorized as an Effectiveness of Care measure and is designed to measure the effectiveness/quality of care delivered. MCP's rate for this measure was consistent with the average for all MC+ MCOs. Thereby, MCP's members are receiving the quality of care for this measure consistent with the care delivered to all other MC+ members.

## ACCESS TO CARE

Mercy Care Plus's calculation of the HEDIS 2006 Prenatal and Postpartum Care measure was not valid. This measure is categorized as an Access/Availability of Care measure and is designed to measure access to the care defined. MCP's reported rate for this measure was consistent with the average for all MC+ MCOs. Thereby, MCP's members are receiving the access to care for this measure consistent with the care delivered to all other MC+ members. However, due to issues with the data submitted by MCP, the EQRO was unable to validate any of the hybrid data for this measure. These difficulties "skew" the ability of the EQRO to have confidence in the MCO's reported rate.

## TIMELINESS OF CARE

Mercy Care Plus's calculation of the HEDIS 2006 Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life measure was fully compliant. This measure is categorized as an Use of Services measure and is designed to measure the timeliness of care received. MCP's reported rate for this measure was consistent with the average for all MC+ MCOs. Thereby, MCP's

members are receiving the timeliness of care for this measure consistent with the care delivered to all other MC+ members. The EQRO was able to fully validate the rate reported by the MCO for this measure and therefore is extremely confident in the MCO's reported rate.

## RECOMMENDATIONS

1. Ensure that all data submitted to the EQRO for review is in the proper format and that files contain all the necessary components in order to be validated.
2. Continue work with MEDLine to improve the number of electronic claims submitted by providers; this should improve accuracy and timeliness of claims.
3. Work to increase rates for all measures, although all measures were consistent with the average for all MC+ MCOs, they were well below the National Medicaid and National Commercial averages.

## 6.3 Validation of Encounter Data

### FINDINGS

The findings for the encounter data validation are organized according to the encounter data evaluation questions presented in the Technical Methods section for the encounter data validation in the aggregate report. Please refer to the main report for detailed objectives, technical methods and procedures for encounter data validation.

#### **What is the Baseline Level of Completeness, Accuracy, and Reasonableness of the Critical Fields?**

For the Medical claim type, there were 127,708 encounter claims paid by the SMA for the period July 1, 2006 through September 30, 2006.

The Outpatient Claim Type field was 100.00% complete, accurate and valid.

The Outpatient Recipient ID field was 100.00% complete, accurate and valid.

The Outpatient First Date of Service field was 100.00% complete, accurate, and valid.

The Outpatient Last Date of Service field was 100.00% complete, accurate, and valid.

The Outpatient Units of Service field was 100.00% complete, accurate and valid.

The Outpatient Procedure Code field was 100.00% complete, accurate, and valid.

The Outpatient Place of Service field was 100.00% complete, accurate and valid.

The first Diagnosis Code field was 100.0% complete, accurate and 97.40% valid.

Although the second through fifth Diagnosis Code fields are optional according to the Health Plan Record Layout Manual, all of these areas fell well below the 100% threshold set by the SMA. The completeness, accuracy, and validity of the second, third, fourth, and fifth Diagnosis Code were 44.52%, 22.68%, 11.87%, and 0.00% respectively. The remaining fields were blank (incomplete, inaccurate, and invalid).

For the Dental claim type, there were 25,243 encounter claims paid by the SMA for the period July 1, 2006 through September 30, 2006. All fields examined were 100.00% complete, accurate and 99.98% valid, as 4 fields contained invalid diagnosis codes. The second Diagnosis Code fields were only 0.03% complete, accurate or valid with only 7 valid diagnosis codes contained in these fields. The third, fourth, and fifth Diagnosis Code fields were 0.00% complete, accurate and valid. All fields were blank (incomplete, inaccurate, and invalid).

For the Home Health claim type, there was zero (0) encounter claims paid by the SMA for the period July 1, 2006 through September 30, 2006.

For the Inpatient claim type, there were 2,598 encounter claims paid by the SMA for the period July 1, 2006 through September 30, 2006.

The Inpatient Claim Type field was 100.00% complete, accurate and valid.

The Recipient ID field was 100.00% complete, accurate and valid.

The Admission Type field was 100.00% complete, accurate and valid.

The Admission Date field was 100.00% complete, accurate and valid.

The Discharge Date field was 100.00% complete, accurate and valid.

The Bill Type field was 100.00% complete, accurate and valid.

The Patient Discharge Status field was 100.00% complete, accurate and valid.

The first Diagnosis Code field was 100% complete, accurate and valid.

The remaining Diagnosis Code fields fell well below the 100% threshold for completeness, accuracy, and validity established by the SMA. The second, third, fourth, and fifth Diagnosis Code fields were found to be 88.22%, 70.63%, 54.35%, and 41.84% complete, accurate, and valid, respectively. The remaining fields were blank (incomplete, inaccurate, and invalid).

The First Date of Service field was 100.00% complete, accurate, and valid.

The Last Date of Service field was 100.00% complete and accurate, and valid.

The Revenue Code field was 100.00% complete, accurate and valid.

The Units of Service field was 100.00% complete, accurate and valid.

For the Outpatient Hospital claim type, there were 54,341 encounter claims paid by the SMA for the period July 1, 2006 through September 30, 2006.

The Outpatient Claim Type field was 100.00% complete, accurate and valid.

The Recipient ID field was 100.00% complete, accurate and valid.

The First Date of Service field was 100.00% complete and accurate, and valid.

The Last Date of Service field was 100.00% complete and accurate, and valid.

The Units of Service field was 100.00% complete, accurate and valid.

The Outpatient Procedure Code field was 100.00% complete and accurate, and 82.31% valid.  
There were 9,611 entries of the invalid code “00000”.

The Revenue Code field was 100.00% complete, accurate and valid.

The first Diagnosis Code field was 100.00% complete, accurate and valid.

Although the second through fifth Diagnosis Code fields are optional according to the Health Plan Record Layout Manual, they all fell well below the 100% threshold set by SMA for completeness, accuracy and validity. The second, third, fourth, and fifth Diagnosis Code files were 51.89%, 24.00%, 9.32%, and 4.39% respectively. The remaining fields were blank (incomplete, inaccurate, and invalid).

For the Pharmacy claim type, there were 59,244 claims paid by the SMA for the period July 1, 2006 through September 30, 2006. All fields examined were 100.00% complete, accurate and valid.

### **What Types of Encounter Claim Data are Missing and Why?**

Based on the above analysis of the accuracy, completeness, and validity of the data in the SMA encounter claims extract file for Mercy CarePlus, an error analysis of the invalid entries was conducted for fields which were lower than the 100.00% threshold specified by the SMA. There were very few errors encountered in the critical fields examined across all claim types. The Hospital Outpatient Procedure Code field contained a large proportion of invalid entries. These invalid codes ranged from 250-950. For the Dental claim type, the Diagnosis Code fields contained 4 invalid entries of the invalid code “4”.

### **What is the Level of Volume and Consistency of Services?**

When comparing the rate of encounter claim types per 1,000 members, Mercy CarePlus demonstrated significantly lower rates than the average for all MC+ MCOs for the Medical, Outpatient Hospital and Inpatient claim types. This may be a function of provider panel composition or claims administration. The possibility of incomplete data cannot be ruled out given the consistent pattern of low rates across claim types. Another possible explanation is less access to care for members, or a healthier member population.

### **To What Extent do the Claims in the State Encounter Claims Database Reflect the Information Documented in the Medical Record? What is the Fault/Match Rate between State Encounter Claims and Medical Records?**

To examine the degree of match between the SMA encounter claims database and the medical record, 100 encounters from each MC+ MCO were randomly selected from Medical claim types for the period of July 1, 2006 through September 30, 2006 for medical record review. Of the 269,134 encounter claim types in the SMA extract file for July 1, 2006 through September 30, 2006, 100 encounters were randomly selected. Providers were requested to submit medical

records for review. There were 88 medical records (88.0%) submitted for review. Encounters for which no documentation was submitted were unable to be validated. The match rate for procedures was 59.74%, with a fault rate of 40.26%. The match rate for diagnoses was 53.25%, with a 46.75% fault rate. The match rate for Name of Drug dispensed was 73.91%, with a 26.09% fault rate. The match rate for Quantity of Drug dispensed was 13.04%, with a fault rate of 86.96%.

### **What Types of Errors Were Noted?**

An error analysis of the errors found in the medical record review for procedure, diagnosis, drug name, and drug quantity was conducted. For the diagnosis code in the medical record, the reasons for diagnosis codes not matching the SMA extract file were missing (n = 30).

For the procedure code in the medical record, the reasons for procedure codes in the SMA extract file not being supported by documentation in the medical record were missing information (n = 19) and upcoded codes (n = 2). Examples of missing information included no code; codes listed that were not supported, or codes that did not match the procedure description.

### **To what Extent do the Claims in the State Encounter Claims Database Reflect the Information Documented in the Medical Record? What is the Fault/Match Rate between State encounter Claims and Medical Records?**

To examine the degree of match between the SMA encounter claims database and the medical record, 100 encounters from each MC+ MCO were randomly selected from all claim types for the period of July 1, 2006 through September 30, 2006 for medical record review.

Of the 891,710 encounter claim types in the SMA extract file for July 1, 2006 through September 30, 2006, 100 encounters were randomly selected. Providers were requested to submit medical records for review. There were 98 medical records (98%) submitted for review. Encounters for which no documentation was submitted were unable to be validated. The match rate for procedures was 81.33%, with a fault rate of 18.67%. The match rate for diagnoses was 84.0%, with a fault rate of 16.0%. The match rate for name of drug dispensed was 96.0%, with a fault rate of 4.0%. The match rate for quantity of drug dispensed was 84.0%, with a fault rate of 16.0%.

## **What Types of Errors Were Noted?**

An error analysis of the errors found on the medical record review for procedure, diagnosis, name of drug dispensed, and quantity of drug dispensed was conducted. For the diagnosis code in the medical record, the reasons for diagnosis codes not matching the SMA extract file were missing information (n = 12). The diagnosis code listed was not found in the record.

For the procedure code in the medical record, the reasons for procedure codes in the SMA extract file not being supported by documentation in the medical record were missing information (n = 12). Examples of missing information included no code; codes listed that were not supported, or codes that did not match the procedure description.

For the name of drug dispensed in the medical record, the reasons for drug names or NDC in the SMA extract file not being supported by documentation in the medical record were missing information (n = 1). No drug name or NDC was found in the records received by the EQRO.

For the quantity of drug dispensed in the medical record, the reasons for quantity of drug in the SMA extract file not being supported by documentation in the medical record were missing information (n = 4). No quantity was found in the records received for review by the EQRO.

## **To what extent do the MC+ MCO paid/unpaid encounter claims match the SMA paid database?**

Since Mercy CarePlus included internal control numbers that matched those of the SMA, the planned analysis of comparing MC+ MCO encounter data to the SMA encounter claim extract file was performed. The SMA defined “unpaid claims” as those claims that the MCO denied for payment, unpaid claims do not include claims paid via a capitation plan.

For all claim types, the MCO only submitted claims with a status of “paid”. The EQRO matched all of these claims to the files contained in the SMA database. Thus, 100.00% of the MCP submitted encounters matched with the SMA encounter records

## **What Problems are there with How Files are Compiled and Submitted by the MC+ MCO?**

The analysis of comparing Mercy CarePlus (MCP) encounter data to the SMA encounter claim extract file was conducted based on the file submitted by MCP that contained all claims for the selected sample of DCNs. While MCP did submit the data in the requested format (see Appendix 7) for the MC+ Managed Care Members represented in the encounter claim sample selected by the EQRO for validation, there were no unpaid or denied claims submitted. There were no unmatched claims that were in the MCP encounter file and absent from the SMA data. Thus, 100.00% of the MCP submitted encounters matched with the SMA encounter records.

## **What are the Data Quality Issues Associated with the Processing of Encounter Data?**

There are no data quality issues specific to this MC+ MCO. The data quality issue that continues to be a challenge for the EQRO is the lack of a unique identifier to match unpaid or denied claims to claims data present in the SMA database.

## **STRENGTHS**

1. All encounter data was submitted in the specified format and included internal control numbers (ICNs) which allowed the EQRO to conduct planned comparisons of the MC+ MCO and SMA data files.
2. The critical field validation of all six claim types resulted in few fields under the SMA established threshold of 100.00% accuracy, completeness, and validity.
3. The critical fields examined for the Dental, Pharmacy and Inpatient claim types were 100.00% complete, accurate and valid.
4. The critical fields examined for Outpatient Hospital and Outpatient Medical were 100% complete and accurate.
5. Data was submitted in the requested format for encounter validation and all claim types were accessed.
6. Mercy CarePlus submitted more encounter medical records for review ( $n = 88$ ) than they have during past reviews.
7. Claim Status (Paid, Denied, & Unpaid) was submitted.

## AREAS FOR IMPROVEMENT

1. Mercy CarePlus has the lowest rate of access per 1,000 members in all encounter categories (Outpatient Medical, Outpatient Hospital, Outpatient Dental, Home Health and Pharmacy).
2. Mercy CarePlus did not have any Home Health claims during the period reviewed.
3. The Outpatient Medical first Diagnosis code field was 97.40% valid, invalid codes should not be present.
4. The Outpatient Hospital procedure code field was 82.31% valid. There were 9,611 entries of the invalid code “00000”.
5. The MCO reported no Home Health encounter claims during the review period.

## RECOMMENDATIONS

1. The MC+ MCO should examine the rate of claims per 1,000 members across claim types and the rate of rejected claims for each claim submission format (UB-92, NSF/CMS 1500, NCPDP 3.0) over time to examine the consistency in claims submission and identify issues for data submission. The access to care should also be examined as a possible reason for the lower rates of encounter claims per 1,000 members.
2. The SMA should examine and revise as needed internal system edits for invalid procedure codes in the NSF/CMS 1500 file layout and run validity checks after the programming of new edits.
3. For the Outpatient Hospital claim type, improve the rate of valid procedure code to flag invalid entries of “00000”.

## 6.4 MCO Compliance with Managed Care Regulations

### METHODS

Prior to the site visit, documentation was received and reviewed regarding the MCO's compliance with the State contract. The External Quality Review Organization (EQRO) reviewed contract documents with the staff of the Division of Medical Services (DMS). It is noted that Mercy CarePlus is a new MC+ MCO resulting from the merger of two previously audited MC+ MCOs, Mercy Health Plan and Community CarePlus. This MCO operated under the name of Community CarePlus prior to the merger. This action became effective with the current Medicaid Managed Care contract that went into operation on July 1, 2006. Members from each MC+ MCO received notification of this change and did have the option of choosing another health plan. The new MC+ MCO, Mercy CarePlus obtained contracts to provide services in all three MC+ Medicaid Managed Care Regions beginning July 1, 2006. Prior to the time of the on-site review, the MC+ MCO stated that their major service area remained in the St. Louis Region. However, they reported now having over 1000 members in the Central Region and 3000 members in the Western Region. They realize this is a small but emerging census in these two areas of service. The MC+ MCO discussed here is compared to the MC+ MCO formerly named Community CarePlus. The MC+ MCO previously known as Mercy Health Plan is no longer contracted with the SMA. Any discussion in this individual report that relates to an issue with Mercy Health Plan will be specifically delineated. On-site review time was used to conduct interviews with those who oversee the daily practices of Mercy CarePlus as it currently operates. This ensures that documentation is developed and practices occur within the scope of the contract and in a manner that meets or exceeds federal regulations.

A detailed protocol (BHC MCO Compliance Review Scoring Form) was utilized to ensure that all the elements of the federal regulations were addressed in the review process. Additionally, an interview tool was constructed to validate practices that occur at the MCO and to follow-up on questions raised from the document review and from the 2004 and 2005 External Quality Review. Document reviews occurred on-site to validate that practices and procedures were in place to guide organizational performance.

### Document Review

#### Performance Management Solutions Group

A division of Behavioral Health Concepts, Inc.



The following documents pertaining to Community CarePlus were reviewed prior to and at the on-site visit:

The Division of Medical Services supplied:

- State of Missouri Contract Compliance Tool (including DMS responses and comments)

The following documents were requested for on-site review:

- Member Handbook
- 2006 Marketing Plan and Materials
- Provider Handbook
- Policy Tracking Log
- Grievance and Appeal Logs
- Staff Training Records
- Credentialing Policies and Audit Reports
- Grievances and Appeals related to members were reviewed, as were Complaints, Grievances, and Appeal files for providers. These files were obtained from a random selection process of actions filed in the first quarter of 2006.
- 2005 Annual Quality Improvement Annual Summary
- Denial Logs
- Opt Out Listing

Additional documentation made available by Mercy CarePlus included:

- Organizational Chart
- Mercy CarePlus Care Management Policy
- Access Standards and Compliance Policy
- Quality Improvement Committee Meeting Minutes
- Unity Managed Mental Health 2006 Medical Record Survey
- MCP Welcome Packets, with correspondence, postcards, privacy/HPPPA information
- 2006 Quality Monitoring Log
- Unity Managed Mental Health – QI Workplan 2006 – Outcomes
- Unity Managed Mental health – CCP 2006 Program Reports

## Interviews

Interviews were conducted with the following group:

### Plan Administration

Jerry Linder – President and CEO  
Robert Profumo, MD – Medical Director  
Cris Cristea – Chief Operating Officer  
Nancy Zmuda – Director, Medical Management  
Marcia Albridge – Director, Business Development  
Robin Woolfolk – Manager, Customer Service  
Jennifer Goedeke – Manager, Quality Improvement  
Vicki Eisenbeis – Director, Customer Service  
Jodi Giordano – Director, Provider Relations

### Mental Health

Marcia Albridge – MCP

### Performance Management Solutions Group

A division of Behavioral Health Concepts, Inc.



Jennifer Goedeke – Manager, Quality Improvement

Unity Health Services:  
Marjorie Viehland, Manager, Utilization Management and Quality Improvement

## FINDINGS

### Enrollee Rights and Protections

Mercy CarePlus continued their efforts to track and monitor all policy required to be submitted to and reviewed by the SMA. This included policy and procedures for initial as well as annual approval, as well as marketing materials. Additionally, the MCO developed an inventory of all written materials or purchased materials that must be approved by the SMA prior to being shared with members. A binder including all Annual Marketing Materials was compiled and shared at the on-site review. It was observed that the MCO made necessary changes that indicated their new name. Contact information did not change for former Mercy CarePlus members. Former Mercy CarePlus members that were merged into the new MC+ MCO did receive appropriate notification.

The Member Handbook was approved by the SMA and continues to be recorded in a format to be shared with members who are visually impaired or have other challenges with written material. Certified interpreters for deaf or non-English speaking members are provided as needed. The International Institute and the Language Access Metro Project (LAMP) are the primary resources used for interpretive services by Mercy CarePlus. The MCO reports receiving a number of calls every month that required interpretive services, these calls have been handled in a routine manner. They do report there have been no new language requests in the past year.

Training is regularly provided to ensure that the Mercy CarePlus Call Center staff is knowledgeable about members' rights and responsibilities. Training sessions were held on two State holidays, when there are normally fewer calls. These training sessions focused on customer services and medical management with a focus on members' rights and responsibilities. All incoming calls are monitored and additional in-service training and coaching is provided based on information gathered. Previously, Call Center staff rotated to provide 24-hour coverage on holidays and weekends. Currently the MCO contracts with Team Health, a

nurse advice line service, for after-hour coverage. This service is available twenty-four (24) hours, seven (7) days per week. The Call Center staff also assists in contacting new members.

Mercy CarePlus continues to enhance case management services to members with special needs. They review all sources to identify members in need of case management, and provide them with individual attention as quickly as possible. Case managers track all pregnant members. Pregnant members receive varying levels of case management services, based on an assessed level of risk. The members with a moderate or high level of risk received enhanced case management throughout their pregnancy and post partum term with the goal of reducing the number of low birth weight babies. The rate of Obstetrical Case Management has increased across all three MC+ Regions. The MCO has tracked statistics indicating that babies born at 28 to 36 weeks are living, which has increased the number of newborn inpatient days in the hospital. Members, with other healthcare issues, that are targeted for case management include those who have high blood lead levels, have identified special healthcare needs, and any catastrophic illness. They currently have three case management coordinators who assist members in obtaining services after-hours.

The MCO now uses a web-based case management system. This system assists in making objective and balanced decisions on services available, such as durable medical equipment. This system is being implemented incrementally. They currently have access to the case review process and have the capability of generating letters to members. The Lead Case Manager maintains a database with information provided by the SMA, and is active in educating providers regarding the use of capillary testing to encourage blood lead level tests for children. This information will be in the new case management system in the near future. The MCO's Medical Director meets with case management staff to discuss cases and holds weekly case conferences. This type of support was beneficial to the MCO and to case management activities. The case management staff conducts outreach to hospitals.

The rating for Enrollee Rights and Protections (53.8%) indicates that Mercy CarePlus continued to have written policies and procedures that were not submitted to the SMA for review and approval. It is to be noted that the MCO made a significant improvement in this area, has improved tracking and internal processes, and is in the process of completing policy development and submission. Mercy CarePlus exhibited a business like approach and

commitment to continue their efforts to improve in the completion and submission of required policies and procedures. Their stated goal was to become fully compliant with all MC+ Medicaid Managed Care contract requirements and federal regulations.

**Table 59 – Subpart C: Enrollee Rights and Protections Yearly Comparison (Mercy CarePlus)**

<b>Federal Regulation</b>	<b>MCP</b>		
	<b>2004</b>	<b>2005</b>	<b>2006</b>
438.100(a) Enrollee Rights: General Rule	1	2	1
438.10(b) Enrollee Rights: Information Requirements	0	1	1
438.10(c)(3) Alternative Language: Prevalent Language	1	2	2
438.10(c)(4,5) Language and Format: Interpreter Services	1	1	2
438.10(d)(1)(i) Information Requirements: Format/Easily Understood	1	2	1
438.10(d)(1)(ii)and (2) Information Requirements: Format Visually Impaired, and Limited Reading Proficiency	0	1	1
438.10(f) Information for All Enrollees: Free Choice, etc.	1	1	2
438.10(g) Information to Enrollees: Specifics/Physician Incentive Plans	2	2	2
438.10(i) Special Rules: Liability for Payment/Cost Sharing	1	1	2
438.100(b)(2)(iii) Enrollee Rights: Provider-Enrollee Communications	1	2	1
438.100(b)(2)(iv,v) Rights to Refuse Services/Advance Directives	1	1	2
438.100(b)(3) Right to Services	1	1	1
438.100(d) Compliance with Other Federal/State Laws	2	2	2
Number Met	2	6	7
Number Partially Met	9	7	6
Number Not Met	2	0	0
Rate Met	15.4%	46.2%	53.8%

Note: 0 = Not Met; 1= Partially Met; 2 = Met

Sources: Department of Health and Human Services Centers for Medicare & Medicaid Services (2003). Monitoring Medicaid Managed Care Organizations (MCOs) and Prepaid Inpatient Health Plans (PIHPs): A protocol for determining compliance with Medicaid Managed Care Proposed Regulations at 42 CFR Parts 400, 430, et al. Final Protocol Version 1.0.; BHC, Inc., 2004 External Quality Review Monitoring MCOs Protocols.

## **Behavioral Health**

Unity Managed Mental Health (UMMH) is the Behavioral Health Organization (BHO) that subcontracts with Mercy CarePlus for mental and behavioral health services for members. The BHO presented and discussed their 2006 program reports. The reports reviewed included Unity Managed Mental Health 2006 Medical Record Survey, Subcontractor Oversight Annual Evaluation and 2006 Quality Improvement Work Plan. One problem identified was a decrease in available access to inpatient treatment. The BHO has developed relationships with new facilities to provide detoxification and inpatient treatment services when needed. They are also contracted with an additional facility for residential and psychiatric services. Provider access has been stable and outpatient services are available on a 24-hour basis. The BHO makes an effort to assist members to obtain timely access to services. Members are encouraged to contact the BHO to make appointments, particularly if they have contacted providers directly without success. Providers are listed on their website in an effort to ensure that members have this information. Adequate providers have been enlisted in both the Central and Western Regions to meet service needs in these areas.

The BHO has made an effort to improve coordination between behavioral health providers and the member's primary care physician. The reports submitted indicate there was a slight decrease in 2006. An educational activity was implemented to address this quality indicator. The BHO recognizes the importance of coordinated care when members receive both behavioral and physical health services. They are committed to continuing improvement in this area.

UMMH discussed their care management program. This program has been enhanced to address the needs of members with high utilization, multiple inpatient readmissions, pregnant women, and those who have a co-morbid diagnosis. They provide a care management methodology to members with multiple mental health issue involvement. The BHO has the desire to place more emphasis on additional care for these members, particularly if this would allow them to avoid hospitalization. Two nurses have been assigned to assist in working with the MCO population. The BHO stated its intention to move to a wellness focused approach to providing care and services. They advocate a change to a healthy living approach to dealing with some of the mental health problems they encounter. This effort is to be expanded after 2006.

UMMH developed and utilized clinical guidelines in the areas of depression and ADHD. The BHO continued work on guidelines for Pregnant Women's Care Coordination. The MCO was involved in this project. Unity Managed Mental Health identified pregnant members assessed with the need for mental health services. Their report indicated that their coordinated case finding efforts improved by 188% during 2005 but decreased slightly in 2006. The majority of these cases were identified by Mercy CarePlus case managers. The BHO and MCO expressed a continued commitment to developing guidelines and practice in the area of providing appropriate mental health support to pregnant members. Their goal is to prevent negative outcomes for the member or infant.

## Quality Assessment and Performance Improvement

### Access Standards

Mercy CarePlus continued to make improvements in the area of access standards during 2006.

The MCO had a schedule to submit policies and procedures to the SMA for annual review as required. The MCO explained that currently all authorizations were received from providers telephonically. Mercy CarePlus staff measured the requests and accompanying information against InterQual criteria. If the decision was to deny the authorization, the information was reviewed by the medical director prior to entry into the MCO system. All authorizations were tracked and monitored. The MCO required prior authorization of all inpatient stays, MRI, CT scan, physical therapy, occupational therapy, speech therapy, certain medications, home health services and pain management. Mercy CarePlus made it clear that there is a system in place to pay for emergency services regardless of who provides them. Policy in this area and addressing the method for covering post-stabilization services has been rewritten and submitted to the SMA for approval.

Mercy CarePlus decreased the timeframes for responding to authorization requests. They updated their policy to ensure that denials would be overturned when adequate information was provided. Tracking and trending of information occurred and is reviewed on a monthly basis.

Member Services reports receiving 15-20 calls per day regarding closed panels. The MCO has implemented a number of strategies to cope with this problem. Most providers agree to see

siblings of children who are already members or patients. Assignments are done with the consultation of the member whenever possible. If auto assignments are required, distance is the main consideration. Direct contact with physicians to assist members with appointments is made whenever necessary. Some issues regarding provider access improved during 2006 when the panels from the former Mercy Health Plan were added to the Mercy CarePlus panel. The MCO added several hospitals and physician groups that had previously not been available. This directly impacted Franklin County members. Mercy CarePlus has now contracted with a hospital located in Franklin County. This has greatly improved access to care in this geographic area. Mercy CarePlus reported that although several large hospitals were not in their network, they maintained a strong relationship with those systems and would create out-of-network agreements for members if the need arose.

Mercy CarePlus reported that they continue to struggle with finding several specialty providers, particularly pediatric neurologists, rheumatologists, and orthopedic surgeons. The MCO has been able to negotiate for these services because the Provider Relations staff developed individualized relationships with providers. They did report paying orthopedic surgeons 100% of billed charges.

Mercy CarePlus assessed provider availability annually when producing their report to the Missouri Department of Insurance. In 2006 the MCO reviewed the availability of 24-hour coverage by providers, as required in their MC+ Medicaid Managed Care Contract. The MCO monitored provider telephone logs, conducted blind telephone testing, and obtained input from providers directly. Mercy CarePlus reported a large degree of success in this area, but admitted that there were providers who needed work. The MCO planned to continue provider education and testing in this area. The MCO reported that they contracted with all of the Federally Qualified Health Centers (FQHCs) in the three MC+ Managed Medicaid areas. This effort improved daytime and some after-hours access.

Ratings for compliance with Access Standards (88.2%) reflect a serious attempt by the MCO to complete required policy to meet the requirements of the MC+ Medicaid Managed Care contract and federal regulations. However, all required policy and procedure are not complete. Mercy CarePlus must continue their efforts to develop necessary policy and practice to be in full

compliance. Observations made at the time of the on-site review indicated that these efforts were continuing and full compliance was a clearly stated goal.

Member Services added two Spanish speaking and one Bosnian speaking staff members when the Central and Western Regions were added to their contract. They also have one staff member who speaks four (4) languages including German. The MCO believes they have adequate diversity and provides members enough alternatives to be comfortable when contact is made.

**Table 60 – Subpart D: Quality Assessment and Performance Improvement: Access Standards Yearly Comparison (Mercy CarePlus)**

Federal Regulation	MCP		
	2004	2005	2006
438.206(b)(1)(i-v) Availability of Services: Provider Network	2	2	2
438.206 (b) (2) Access to Well Woman Care: Direct Access	1	1	2
438.206(b)(3) Second Opinions	2	2	2
438.206(b)(4) Out of Network Services: Adequate and Timely Coverage	1	1	2
438.206(b)(5) Out of Network Services: Cost Sharing	1	1	1
438.206(c)(1)(i-vi) Timely Access	1	1	2
438.206(c)(2) Provider Services: Cultural Competency	2	2	2
438.208(b) Care Coordination: Primary Care	1	1	2
438.208(c)(1) Care Coordination: Identification	2	2	2
438.208(c)(2) Care Coordination: Assessment	1	1	2
438.208(c)(3) Care Coordination: Treatment Plans	1	1	2
438.208(c)(4) Care Coordination: Direct Access to Specialists	0	1	2
438.210(b) Authorization of Services	0	2	2
438.210(c) Notice of Adverse Action	1	2	2
438.210(d) Timeframes for Decisions, Expedited Authorizations	1	2	2
438.210(e) Compensation of Utilization Management Activities	1	2	2
438.114 Emergency and Post-Stabilization Services	0	1	1
Number Met	4	8	15
Number Partially Met	10	9	2
Number Not Met	3	0	0
Rate Met	23.5%	47.1%	88.2%

Note: 0 = Not Met; 1= Partially Met; 2 = Met

Sources: Department of Health and Human Services Centers for Medicare & Medicaid Services (2003). Monitoring Medicaid Managed Care Organizations (MCOs) and Prepaid Inpatient Health Plans (PIHPs): A protocol for determining compliance with Medicaid Managed Care Proposed Regulations at 42 CFR Parts 400, 430, et al. Final Protocol Version 1.0.; BHC, Inc., 2004 External Quality Review Monitoring MCOs Protocols.

## Structures and Operation Standards

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Mercy CarePlus continued to develop their credentialing standards. The MCO assured that all providers maintained licensure and the right to practice in Missouri. Source One was employed to run a monthly data scan against licensing listings. This process enabled the MCO to maintain current licensure information. Mercy CarePlus reported that they were current on all credentialing for new physicians and on delegated credentialing. The MCO developed a work plan to ensure that the remaining provider list would be current during the coming year. The MCO expected to be current on all providers due for credentialing within a few months. Delegated credentialing is granted to the SSM hospital system and to the BHO Unity Managed Mental Health. Certification of the delegated credentialing is completed by Source One.

During 2006 an after-hours survey was conducted that indicated problems in several areas. One of these was telephone access to twenty-four hour primary care physician (PCP) availability. Mercy CarePlus worked toward making after-hours services available to prevent the unnecessary use of emergency rooms. The MCO provided education to members on the use of the Team Health Nurse Advice Line, and contacted PCPs directly if problems were not resolved. Provider representatives visited these PCP offices every six weeks for follow-up, and provided additional assistance to trouble shoot specific issues. Mercy CarePlus developed an oversight tool for this purpose, which has also been adopted by the Behavioral Health Contractor.

Mercy CarePlus has instituted a more rigorous approach to training to ensure that staff is aware of new policies and procedures. This has led to improved services and improved interdepartmental communications.

The rating for Structure and Operation Standards (80%) reflects the timely and efficient submission of policy to the SMA for their review and approval. The MCO understood that continued improvement in this area of practice was needed. However, they continued to make progress. Observations at the time of the on-site review supported Mercy CarePlus's success at identifying and improving areas that had previously been problematic.



**Table 61 – Subpart D: Quality Assessment and Performance Improvement: Structure and Operation Standards Yearly Comparison (Mercy CarePlus)**

Federal Regulation	MCP		
	2004	2005	2006
438.214(a,b) Provider Selection: Credentialing/Recredentialing	1	1	1
438.214(c) and 438.12 Provider Selection: Nondiscrimination	2	2	2
438.214(d) Provider Selection: Excluded Providers	1	2	2
438.214(e) Provider Selection: State Requirements	2	2	2
438.226 and 438.56(b)(1-3) Disenrollment: Requirements and limitations	1	1	2
438.56(c) Disenrollment Requested by the Enrollee	2	2	2
438.56(d) Disenrollment: Procedures	2	2	2
438.56(e) Disenrollment: Timeframes	1	2	2
438.228 Grievance System	1	2	2
438.230(a,b) Subcontractual Relationships and Delegation	1	2	2
Number Met	4	8	9
Number Partially Met	6	2	1
Number Not Met	0	0	0
Rate Met	40.0%	80.0%	90%

Note: 0 = Not Met; 1= Partially Met; 2 = Met

Sources: Department of Health and Human Services Centers for Medicare & Medicaid Services (2003). Monitoring Medicaid Managed Care Organizations (MCOs) and Prepaid Inpatient Health Plans (PIHPs): A protocol for determining compliance with Medicaid Managed Care Proposed Regulations at 42 CFR Parts 400, 430, et al. Final Protocol Version 1.0.; BHC, Inc., 2004 External Quality Review Monitoring MCOs Protocols.

### **Measurement and Improvement**

Mercy CarePlus had not developed or implemented specific practice guidelines with providers at the time of the 2005 review. The MCO has now instituted the National Heart, Lung, and Blood Guidelines for asthma care for adults and children. NIH clinical guidelines and Kansas City guidelines were adopted for several other areas of healthcare delivery. This information and methods to utilize these guidelines have been distributed to all MCO providers.

Mercy CarePlus instituted a number of Quality Assessment and Performance Improvement activities during 2006. Their Quality Improvement group meets quarterly and includes local physicians who actively participated. The MCO's goal of providing quality services to members was the focus of the group's discussions. Mercy CarePlus viewed this initiative as having a positive effect on the performance and focus of the MCO. The QA & I group is currently looking at tracking and trending the MCO system to ensure member access in a timely and

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efficient manner. The MCO hopes to use this information to ensure that all members have adequate access to those services.

Mercy CarePlus worked with the Missouri Department of Health and Senior Services (DHSS) to obtain historical immunization information since November 2004. The MCO is now using the MOSAIC system to obtain lead and immunization statistics.

Mercy CarePlus reported that the Quality Assessment and Improvement program was involved in the development of policy regarding member Grievance and Appeals, and provider Complaints, Grievances and Appeals. The MCO set up an internal monitoring process and found a 100% success rate in sending letters according to policy during the first quarter of 2006.

Mercy CarePlus submitted two Performance Improvement Projects (PIPs) for validation. Although these PIPs lacked maturity to allow for complete validation, they indicated substantial improvement in utilization of this process as a tool for MCO growth. The structure of both PIPs followed the federal protocol and showed a great deal of potential.

The MCO submitted all required information to complete the Validation of Performance Measures for two measures, as requested. For the third measure to be validated, Prenatal and Post Partum Care, the MCO did not submit the correct hybrid data and only the administrative portion of this measure will not be reviewed. This issue is discussed in the appropriate section of this report. Mercy CarePlus continued to operate a health information system within the guidelines of that protocol. All encounter data requested was provided in the correct format. The complete details of each of these areas of validation can be reviewed within specific sections of this report.

The rating for Measurement and Improvement (100%) reflects a diligence toward meeting the requirements of the MC+ Medicaid Managed Care contract and federal regulations. Many policies and procedures have been submitted to the SMA for their review and approval. Some policy development must still occur.

**Table 62 – Subpart D: Quality Assessment and Performance Improvement: Measurement and Improvement Yearly Comparison (Mercy CarePlus)**

Federal Regulation	MCP		
	2004	2005	2006
438.236(b)(1-4) Practice Guidelines: Adoption	1	1	2
438.236(c) Practice Guidelines: Dissemination	1	1	2
438.236(d) Practice Guidelines: Application	2	1	2
438.240(a)(1) QAPI: General Rules	1	1	2
438.240(b)(1) and 438.240(d) QAPI: Basic Elements of MCO Quality Improvement and PIPs	1	1	2
438.240(b)(2)(c) and 438.204(c) QAPI: Performance Measurement	1	2	2
438.240(b)(3) QAPI: Basic Elements/Over and Under Utilization	1	2	2
438.240(b)(4) QAPI: Basic Elements regarding Special Healthcare Needs	1	2	2
438.240(e) QAPI: Program Review by State	NA	NA	NA
438.242(a) Health Information Systems	2	2	2
438.242(b)(1,2) Health Information Systems: Basic Elements	1	2	2
438.242(b)(3) Health Information Systems: Basic Elements	1	2	2
Number Met	2	6	11
Number Partially Met	9	5	0
Number Not Met	0	0	0
Rate Met	18.2%	54.5%	100%

Note: Regulation 438.240(e) refers to program review by the state. The regulation requires the state to review, at least annually, the impact and effectiveness of each MCO's quality assessment and performance improvement program. The regulation refers to the state QA & I program review process and is not applicable to External Quality Review of the MC+ Managed Care Program. This percent is calculated for the regulations that are applicable tot the MC+ Managed Care Program.

0 = Not Met; 1 = Partially Met; 2 = Met

Sources: Department of Health and Human Services Centers for Medicare & Medicaid Services (2003). *Monitoring Medicaid Managed Care Organizations (MCOs) and Prepaid Inpatient Health Plans (PIHPs): A protocol for determining compliance with Medicaid Managed Care Proposed Regulations at 42 CFR Parts 400, 430, et al. Final Protocol Version 1.0.; BHC, Inc., 2004 External Quality Review Monitoring MCOs Protocols.*

### Grievance Systems

Mercy CarePlus completed and submitted all required policy and procedures to make their Grievance System compliant with MC+ Medicaid Managed Care contract requirements and federal regulations. The MCO put processes in place to capture member and provider contacts. The MCO reported that they are working smarter and developed better communication between internal departments. This enhanced their ability to track and respond to member grievance and appeals, as well as provider complaints, grievances, and appeals. To accomplish the additional responsibilities in the area of response to member grievance and appeals, and provider complaints grievances and appeals, Mercy CarePlus has three coordinators in place. The additional staff added in the past year has assisted in obtaining success for this portion of

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this program. The MCO developed an on-line tracking system that contributes to timely responses in the complaint, grievance and appeal process.

Two member grievances were reviewed. Both of these concerned transportation issues. Follow-up was completed on these grievances in the appropriate timeframes. Vendor education occurred and was reflected in the member files when this action was dictated by the findings.

Three member appeals were reviewed. All were resolved within the required timeframes. It should be noted that reference was made regarding training to member services staff to remind them to inform members of their right to file a grievance. The MCO reported that there are an increased number of grievances since completion of this training. The need to provide assistance to members in writing appeals was discussed. Originally the MCO was not aware of this requirement. Staff training has also occurred for this topic and staff are assisting members with appeal letters as needed.

Five provider complaints were reviewed. These files did contain required information and correspondence. All correspondence was mailed within the required timeframes.

Mercy CarePlus admitted that at the time of the previous review that their system was in disarray. They have worked diligently to improve their internal processes and practices to establish a system that is efficient and responsive to both members and providers. At the time of the on-site review records contained all required correspondence and documentation. It was in chronological order and appeared to be complete. The MCO shared the current Grievance System policy and tracking information. It appears that significant improvement has occurred in their processes.

The rating for the Grievance System (100%) reflects approval of the majority of policy and procedures required to meet MC+ Medicaid Managed Care contract requirements and federal policy. Practices observed at the time of the on-site review indicated that Mercy CarePlus was meeting all requirements of operating a functional Grievance System for both providers and members. Follow-up review of the Grievance System should occur in the future.

**Table 63 – Subpart F: Grievance Systems Yearly Comparison (Mercy CarePlus)**

<b>Federal Regulation</b>	<b>MCP</b>		
	<b>2004</b>	<b>2005</b>	<b>2006</b>
438.402(a) Grievance and Appeals: General Requirements	2	2	2
438.402(b)(1) Grievance System: Filing Requirements - Authority	2	2	2
438.402(b)(2) Grievance System: Filing Requirements - Timing	2	2	2
438.402(b)(3) Grievance System: Filing Requirements - Procedures	2	2	2
438.404(a) Grievance System: Notice of Action - Language and Format	1	2	2
438.404(b) Notice of Action: Content	1	2	2
438.404(c) Notice of Action: Timing	1	2	2
438.406(a) Handling of Grievances and Appeals: General Requirements	1	2	2
438.406(b) Handling of Grievance and Appeals: Special Requirements for Appeals	2	2	2
438.408(a) Resolution and Notification: Basic Rule	2	2	2
438.408(b,c) Resolution and Notification: Grievances and Appeals - Timeframes and Extensions	2	2	2
438.408(d)(e) Resolution and Notification: Grievance and Appeals - Format and Content of Notice	1	2	2
438.408(f) Resolution and Notification: Grievances and Appeals - Requirements for State Fair Hearings	1	2	2
438.410 Expedited Resolution of Appeals	1	2	2
438.414 Information about the Grievance System to Providers and Subcontractors	1	2	2
438.416 Recordkeeping and Reporting Requirements	0	1	2
438.420 Continuation of Benefits while Appeal/Fair Hearing Pends	2	2	2
438.424 Effectuation of Reversed Appeal Resolutions	2	2	2
Number Met	9	17	18
Number Partially Met	8	1	0
Number Not Met	1	0	0
Rate Met	50.0%	94.4%	100%

Note: 0 = Not Met; 1 = Partially Met; 2 = Met

Sources: Department of Health and Human Services Centers for Medicare & Medicaid Services (2003). Monitoring Medicaid Managed Care Organizations (MCOs) and Prepaid Inpatient Health Plans (PIHPs): A protocol for determining compliance with Medicaid Managed Care Proposed Regulations at 42 CFR Parts 400, 430, et al. Final Protocol Version 1.0.; BHC, Inc., 2004 External Quality Review Monitoring MCOs Protocols

## Conclusions

Although Mercy CarePlus was not 100% compliant in all areas, it must be noted that the MCO made significant improvement in policy and procedure submission and approval in all areas. At the time of the 2005 EQR areas of practice not meeting compliance standards were also identified. At the time of this review improvement in many areas of performance were observed. Mercy CarePlus continued their commitment to members and to providing healthcare services in an effective manner by demonstrating an atmosphere of respect and dignity toward members. Although the MCO was not fully compliant, the improvements

witnessed at this review provided a sound foundation for continued efforts to make the changes required to meet full compliance in the future.

### **QUALITY OF CARE**

During the on-site review Mercy CarePlus indicated that they recognized the need to improve in the development of policies and procedures, and continue to review and upgrade their organization's performance. They exhibited a commitment to these goals, and provided sound examples of the progress made during 2006. These discussions took place in the context of providing quality care and services to members. There was a distinct recognition of the importance within the organization of the need for clear communication between departments to effectively meet members' service needs. Quality services at the MCO and provider levels were evident in the information presented. It should also be noted that this MCO maintains a system of regular direct contact with providers. Provider relations staff makes regular in-person visits, at approximately six week intervals, to provider offices. This enhances the quality of relationships between the MCO and their providers, enabling them to troubleshoot, educate, and ensure that members receive the healthcare services they require.

### **ACCESS TO CARE**

Mercy CarePlus did make a number of changes during this year to improve access to care for members. They were able to contract with a number of hospitals that were previously not in their network. Their provider panel has expanded in the availability of primary care physicians and specialists. The MCO instituted a method of contacting primary care physicians for members when members experience problems obtaining appointments. All of these activities, as well as improvements and training for customer service staff, and additions in resources for case management have created an atmosphere where assuring access to care is an essential aspect of the Mercy CarePlus program.

### **TIMELINESS OF CARE**

An attention to the issue of timeliness of care was also evident at the MCO. Although they continue to struggle with timely and complete policy submission, significant improvement has occurred. Changes and improvements of internal processes have also made timely response to member and provider issues a priority. Timeliness of healthcare improved as the result of changes and expansions within the organization.

## RECOMMENDATIONS

1. Continue to develop the atmosphere within Mercy CarePlus that motivates the attention to compliance with contractual requirements and federal regulations. A great deal of improvement was witnessed in this area. Maintaining these improvements is an important factor in establishing continued confidence in the MCO.
2. Continue to utilize the resources at Mercy CarePlus to complete all necessary policy documentation and submission to the SMA.
3. Continue to enhance the area of quality improvement initiatives internally within the organization to ensure that quality services occur for members.
4. Continue to utilize available data and member information in order to drive, change, and measure performance.

## 7.0 HealthCare USA



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The previous sections of the 2006 EQRO report present the purpose and objectives, technical methods, procedures for evaluation, and MCO to MCO comparisons of analyses, findings, and recommendations for each of the protocols based on the aggregate analysis. This section of the EQRO report summarizes MC+ MCO specific methods, procedures, findings, and recommendations for improving the quality, timeliness, and access to care for MC+ Managed Care Members. Please refer to the main report for detailed technical objectives, methods, and presentation of data that are referenced here for the MC+ MCO.

## 7.1 Performance Improvement Projects

### METHODS

#### Document Review

HealthCare USA supplied the following documentation for review:

- Performance Improvement Project 2006: Increasing the Overall Encounter Acceptance Rate for Encounter Data Sent to the State of Missouri
- Performance Improvement Project 2006: Improving Post-Discharge Management of Members Discharged from an Inpatient Service for Mental Illness

#### Interviews

Interviews were conducted with the project leaders for each Performance Improvement Project (PIP) by the EQRO team on July 18, 2007 during the on-site review, and included the following:

Jackie Inglis – VP Health Services  
Cathy Krueger – Supervisor, Quality Improvement  
Debbie Fitzgerald -- Director, Health Services  
Rick Littell – VP of Operations, MHNet  
Sheryl Jeffries – VP Quality Improvement, MHNet

The interviewees shared information on the validation methods, study design, and findings. Technical assistance regarding study design and presentation of findings was provided by the EQRO. The following questions were addressed:

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- Who was the Project Leader?
- How was the topic identified?
- How was the study question determined?
- What were the findings?
- What was the intervention?
- What was the time period of the study?
- Was the intervention effective?
- What does HCUSA want to study or learn from their PIPs?

The PIPs submitted for validation included a substantive amount of information. Additional analysis has occurred between the time of the original submission of information and the time of the on-site review. The MC+MCO was instructed that they could submit additional information that included outcomes of the intervention. Additional clarifying written information was received after the on-site review.

## FINDINGS

The first PIP evaluated was considered non-clinical and was entitled “Increasing the Overall Encounter Acceptance Rate for Encounter Data Sent to the State of Missouri.” The study topic was explained clearly and accurately. The narrative made an attempt to relate the topic to member care. However, it was focused on internal encounter claim processes and could only be related to patient services in a minor way. The project narrative did assert that the goal was to “paint an accurate picture of enrollee utilization” and would be used to determine if certain populations were underserved. In spite of these statements, it was difficult throughout the entire project to ensure that the focus was on identifying and correcting deficiencies in care or services rather than on utilization or cost.

The study question presented was: “Will operational adjustments improve the overall acceptance rate for encounter data sent to the SMA? This increased encounter data acceptance will improve data to assess access to services for members.” This is clearly a technical and non-clinical study. The MC+MCO did continue to attempt to relate the topic to improved member services.

Indicators and goals are presented in a table included in the presentation. The narrative explanation states that the study indicator being measured is the percentage of

encounters submitted to the SMA that are accepted as valid encounters according to requirements. The goal for the PIP was an overall rate of 95%, which is an SMA requirement. The study topic asserted that with complete and accurate encounter data the MC+MCO could implement more precise measures for the population with lower utilization. The indicators, as presented, did not measure any change or improvement in health or functional status for members. This did lead to some question about the intention of the study to improve MC+MCO functions that better served members.

All members of the MC+MCO are included in the study population with no exclusions. All accepted encounter data was included. The MC+MCO did use capitated providers who do not supply claims or contacts. This variable was not addressed in terms of how this lack of data affected conclusions or outcomes of the study. The MC+MCO did state that they intend to focus on completeness of all data during the ongoing study process. The study did not use any sampling methodology.

The data to be collected was defined in the narrative. The MC+MCO uses the IDX managed care system which automatically runs an outgoing claims report weekly. The MC+MCO staff extracted data and the PIP included very specific definitions about the analysis of the data and the manner in which they intended to evaluate the data. The study included a systematic method for ensuring valid and reliable data will be determined. This methodology included an explanation of capturing all claims and how they will assess the completeness of encounters. After this process is complete the MC+MCO will develop an educational plan for providers. The study implies a prospective data analysis plan. The narrative does identify barriers to the improvement strategy, and a proposed intervention for providers, and MC+ MCO staff.

Planned interventions were described in detail in the information provided. Portions of this study were completed in 2005 and 2006. The results and planned changes to enhance the study in 2007 were included. How these changes improve member services was explained. A comprehensive assessment of the study validity will not be available until its conclusion. Assessment of real improvement is not yet available. The

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factor that was not available or included in any manner was how the results, real or projected, are relevant to improved member care or functional status.

The second PIP evaluated was titled “Improving Post-Discharge Management of Members Discharged from an Inpatient Service for Mental Illness.” This study was considered clinical and focused on improving compliance with ambulatory follow-up appointments after discharge from inpatient mental health treatment, as an important factor in preventing re-hospitalizations. The project narrative clearly identified how compliance with improved aftercare treatment is tied to access and availability of services for members. The decision to enact this study was well defined and supported by both local data and information and based on a substantial literature review that compared both national and regional standards. This review and analysis provided a substantial argument for the topic choice, and also for the interventions identified. The approach to this Performance Improvement Project was not just to present a clinical study, but to implement successful interventions to improve services to members. This study was focused on the Eastern MC+ Region. However, the information communicated at the time of the on-site review provided information that the MC+MCO will consider expanding these interventions to all regions as this project is completed.

The study question presented was “Whether more adherence to aftercare and discharge planning to include education for families and members increases compliance for post-hospitalization referral visit within seven (7) or thirty (30) days.” The question defined the focus and goals of the study underway. Indicators for this study were included and defined with substantive information about how they were to be counted and analyzed. The information provided clearly led the reader to understand that the focus of the study will be improving compliance with recommended aftercare services thereby improving outcomes regarding prevention of subsequent in-patient treatment. Although the population served by this study only includes the Eastern MC+ regions, it does include all members who begin this intervention prior to discharge from an inpatient level of care.

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The data collection methodology was included. Data was obtained quarterly and put in reports. These reports were then combined and analyzed on a yearly basis. Data sources and how they were to be measured and utilized in impacting services to members, and how they would be used to analyze project success were provided. A complete prospective data analysis plan was included providing the history of this quality initiative and updates that led to the current study.

An analysis of the findings was included from the 2003 baseline information and the 2004-2006 re-measurement data. At the time of the on-site review additional information and clarification were provided. All information presented was well documented, labeled and explained. The data does indicate real improvement. Over time the outcomes of this PIP indicate that the interventions did increase the use of follow-up services in both 7 and 30 days. The utilization of these services decreased the need for in-patient treatment. The results also indicate that services available to members also improved. Case management services assisted in ensuring that members were aware of available services and had the supports needed to utilize these services.

## Conclusions

### QUALITY OF CARE

Both PIPs seek to improve the quality of services to members. The non-clinical PIP seeks to improve the quality of encounter data acceptance. In terms of internal procedures and practices this PIP could have the effect of improving encounter data acceptance making MC+MCO operations more efficient and effective. If the MC+MCO engages in appropriate follow-up it may be able to identify members who are underserved, and thereby improving the services provided to the entire member population. The interventions described in the clinical PIP are clearly targeted to improve the quality and effectiveness of aftercare services for members receiving inpatient mental health treatment. By assisting members in accessing outpatient

treatment services, and thereby avoiding the need for repeat inpatient treatment, the MC+MCO will ensure that preventive and the most effective services will be in place.

### ACCESS TO CARE

The clinical PIP had a specific focus on access to care. The study sought to ensure that members who had received in-patient treatment for mental health related issues were aware of the need to begin and continue to access outpatient treatment services. By undertaking the methodology involved in the Performance Improvement Project the access to outpatient care improved, as did the members who appropriately utilized these services. The non-clinical PIP also had the espoused theory of increasing access to healthcare services. The narrative did not clearly make the case to ensure that this goal was addressed through the PIP process. It was not addressed in the narrative included and the focus on this goal was not evident throughout the project.

### TIMELINESS OF CARE

The services and interventions used in the clinical PIP did have the specific outcome of improving the timeliness of appropriate outpatient services for any member who had received in-patient mental health services. In this PIP the areas of access, quality, and timeliness of care were of the utmost importance. The outcome was focused on improving the availability of services at seven and thirty days following inpatient services. Timely access to care was a main focus of this project and the interventions utilized had the effect of improving the number of members who attended outpatient treatment in the required timeframes. The non-clinical PIP also considered timeliness in looking at a methodology to have encounter data processed and accepted quickly and efficiently. Although the narrative provided did not completely discuss how this new and improved process would also improve timely service to the member, it should be noted that timely access to care was a stated goal of the PIP before it was started.

### RECOMMENDATIONS

- I. HealthCare USA has attempted to improve the timeliness, quality, and access to care for members requiring health care services in the process of each of these

Performance Improvement Projects. The non-clinical project information provided did not relate the originally stated projected goal of the project to a specific and articulated benefit to members. The non-clinical PIP did not include a prospective data analysis plan in the project planning documentation. The PIP should contain complete narrative information on all aspects of the project to ensure that the project is understandable and complete.

2. The MC+MCO should also address how their projects will be extended to all the MC+ Regions served. In making the improvements experienced in the Eastern MC+ Region available to the Central and Western MC+ Regions some alterations may be required to replicate the effectiveness of the intervention.
3. The MC+MCO indicated that the processes described in both PIPs are to be incorporated in the regular agency processes. This is an important aspect of the PIP process and should occur to ensure that improvements continue on a sustained basis.

## 7.2 Validation of Performance Measures

### METHODS

This section describes the documents, data, and persons interviewed for the Validating Performance Measures Protocol for HealthCare USA. HealthCare USA submitted the requested documents on January 3, 2007. The EQRO reviewed documentation between January 3, 2007 and May 1, 2007. On-site review time was used to conduct follow-up questions and provide feedback and recommendations regarding the performance measure rate calculation.

### Document Review

The following are the documents reviewed by the EQRO:

- The HealthCare USA Baseline Assessment Tool (BAT) for the HEDIS 2006 data reporting year
- Information Systems Capabilities Assessment (ISCA) completed by HCUSA
- HealthcareData.com LLC's Compliance Audit Report for HEDIS 2006
- HealthCare USA's information systems policies and procedures with regard to calculation of HEDIS 2006 rates
- HealthCare USA meeting minutes on information system (IS) policies
- A sample of Catalyst's production logs and run controls
- National Council on Quality Assurance (NCQA)-certified HEDIS software certification report from Catalyst Technologies
- Data field definitions & claims file requirements of the Coventry Corporate Data Warehouse
- Data files from the Coventry Corporate Data Warehouse containing the eligible population, numerators and denominators for each of the three measures.
- HEDIS 2006 Data Submission Tool
- HEDIS 2006 product work plan

The following are the data files submitted by HealthCare USA for review by the EQRO:

- fuh06\_file1.txt
- fuh06\_file2.txt
- ppc06\_file1.txt
- ppc06\_file2.txt
- W3406\_file1.txt
- W3406\_file2.txt

The Information Systems Capabilities Assessment (ISCA) review was conducted by the EQRO according to Appendix Z of the Validating Performance Measures protocol. The EQRO Project Director and Research Analyst reviewed all ISCA information provided by the plan. Follow-up reviews were conducted with HealthCare USA staff during on site reviews. The review of

HCUSA focused on HCUSA's ability to accurately report Medicaid data as required by State and Federal regulation. To fulfill its obligations as a Medicaid contractor, HCUSA must demonstrate that it has the automated systems, management practices, data control procedures and rate calculation procedures required in place to assure that the data is adequately captured, stored, translated, analyzed, and reported.

The EQRO found that HealthCare USA's Information Systems (IS): 1) contained complete and accurate encounter data, as specifically detailed in HCUSA's Validation of Encounter Data section (Section 7.3) of this report; 2) correctly calculated the performance measures reviewed, as specifically detailed below in this Validation of Performance Measure section of the report; 3) contributed to HCUSA's ability to conduct quality assessment and improvement initiatives, as specifically detailed in HCUSA's Compliance with Managed Care Regulations section of this report (Section 7.4); and 4) allowed HCUSA to oversee and manage the delivery of health care to its enrollees, as specifically detailed below in the Conclusions subsection of this section (Section 7.2) of the report.

## **Interviews**

The EQRO conducted on-site interviews at HealthCare USA in St. Louis Wednesday, July 18, 2007 with Cathie Krueger, Supervisor, Quality Improvement, Lisa Baird, Director, Medicaid Products and Laura Fraser, Q.I. Coordinator. Also available by phone were Rina David-Clayton and Geoff Welsh, who represented the software vendor Catalyst Technologies. This group was responsible for calculating the HEDIS 2006 performance measures. The objective of the visit was to verify the methods and processes behind the calculation of the three HEDIS 2006 performance measures.

## **FINDINGS**

HealthCare USA calculated all three of the HEDIS 2006 measure being reviewed using the Administrative method. MCO to MCO comparisons of the rates of Prenatal and Postpartum Care, Well-Child Visits, and Follow-Up After Hospitalization measures were conducted using two-tailed z-tests. For comparisons that were statistically significant at the 95% confidence interval (CI), the z-score (z), the upper and lower confidence intervals (CI), and the significance levels ( $p < .05$ ) are reported.

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The rate for the HEDIS 2006 Prenatal and Postpartum Care measure (prenatal rate) reported by HealthCare USA to the SMA and the State Public Health Agency (SPHA) was 51.81%. This was comparable to the statewide rate for all MC+ MCOs (53.30%;  $z = -0.64$ ; 95% CI: 36.40%, 67.23%;  $p < .05$ ). The postpartum rate reported by the MCO was 39.46%, which was significantly lower than the statewide rate for all MC+ MCOs (44.54%;  $z = -1.49$ ; 95% CI: 24.04%, 54.88%;  $p < .05$ ).

The reported Well-Child Visit rate was 58.76%; this is comparable to the statewide rate for all MC+ MCOs (58.32%;  $z = -0.43$ , 95% CI: 52.00%, 64.22%;  $p < .05$ ).

The Follow-Up After Hospitalization for Mental Illness measure is reported in both 7 day follow-up and 30 day follow-up rates. HealthCare USA reported a 7 day rate of 29.04%, which is comparable to the statewide rate for all MC+ MCOs (31.16%;  $z = -0.34$ ; 95% CI: 12.23%, 33.25%,  $p < .05$ ). The 30 day rate of 51.03% reported by HealthCare USA was also comparable to the statewide rate for all MC+ MCOs (52.92%;  $z = -0.58$ ; 95% CI: 34.65%, 55.06%;  $p < .05$ ).

The following sections summarize the findings of the process for validating each of the performance measures in accordance with the Validating Performance Measures Protocol. The findings from all review activities are presented according to the EQRO validation activity, with the findings for each measure discussed within the activities as appropriate. Please refer to the tables in the main report for activities, ratings, and comments related to the [CMS Protocol](#) [Validating Performance Measures Attachments](#).

## Data Integration and Control

The information systems management policies and procedures for rate calculation were evaluated consistent with the Validating Performance Measures Protocol. This included both manual and automatic processes of information collection, storing, analyzing and reporting. For all three measures, HealthCare USA was found to meet all the criteria for producing complete and accurate data (see CMS Protocol Validating Performance Measures Attachment V: Data Integration and Control Findings). There were no biases or errors found in the manner in which HealthCare USA transferred data into the repository used for calculating the HEDIS 2006 measures. HealthCare USA used an NCQA-certified software vendor, Catalyst, for the HEDIS 2006 measure calculation process. The use of NCQA-certified reporter software, which has been certified through a process of test files, indicates that the program specifications, codes,

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and measure parameters are adequate for validly reporting the rates. However, the codes, program specifications, and measure parameters could not be independently validated by the EQRO as we were unable to view the data prior to it being processed by the software.

### **Documentation of Data and Processes**

It is assumed that the data and processes used for the calculation of measures were adequate (see CMS Protocol Validating Performance Measures Attachment VII: Data and Processes Used to Calculate and Report Performance Measures). HealthCare USA met all criteria that applied for all three measures.

### **Processes Used to Produce Denominators**

HealthCare USA met all criteria for the processes employed to produce the denominators of the performance measures validated (see CMS Protocol Validating Performance Measures Attachment X: Denominator Validation Findings). This involves the selection of eligible members for the services being measured. Denominators in the final data files were consistent with those reported on the DST for the three measures validated. All members were unique and the dates of birth ranges were valid.

A total of 25,541 eligible members were reported for the Well-Child Visits measure.

A total of 730 eligible members were reported for the denominator of the Follow-Up After Hospitalization measure.

There were 6,589 eligible members reported and validated for the denominator of the Prenatal and Postpartum Care measure.

### **Processes Used to Produce Numerators**

All three measures were calculated using the Administrative Method. Measures included the appropriate data ranges for the qualifying events (e.g., prenatal or postpartum visits, well-child visits, or follow-up visits) as specified by the HEDIS 2006 Technical Specifications (see CMS Protocol Validating Performance Measures Attachment XIII: Numerator Validation Findings). No medical record reviews were conducted or validated.

HealthCare USA reported a total of 3,414 administrative hits and 3,414 were found for the prenatal rate of the Prenatal and Postpartum Care measure. For the postpartum rate, 2,600 of the reported 2,600 hits were validated by the EQRO. This resulted in a prenatal rate of 51.81% and a postpartum rate of 39.46%, both with no estimated bias.

For the HEDIS 2006 Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life measure, there were a total of 15,008 administrative hits reported and 14,842 hits found. This resulted in a rate of 58.11%, with an overestimate of 0.65%.

The number of administrative hits reported for the HEDIS 2006 Follow-Up After Hospitalization for Mental Illness for Mental Illness measure (7 day rate) was 212; the EQRO found 166. This resulted in a rate of 22.74%, an overestimate of 6.30%. The EQRO verified 327 of 372 hits for the 30 day rate, resulting in a rate of 44.86%. This is a 6.17% overestimate by the MCO for this measure.

### **Sampling Procedures for Hybrid Methods**

No medical record reviews were conducted or validated. [CMS Protocol Validating Performance Measures Attachment XII: Impact of Medical Record Review Findings and CMS Protocol](#) [Validating Performance Measures Attachment XV: Sampling Validation Findings](#) do not apply to the Administrative Method.

### **Submission of Measures to the State**

HealthCare USA submitted the DST for each of the three measures to the SPHA (the Missouri Department of Health and Senior Services) in accordance with the Code of State Regulations (19 CSR §10-5.010 Monitoring Health Maintenance Organizations) and the SMA Quality Improvement Strategy.

### **Determination of Validation Findings and Calculation of Bias**

As previously noted, the MCO overestimated both the Follow-Up After Hospitalization for Mental Illness for Mental Illness and Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life measures. There was no estimated bias for the Prenatal and Postpartum Care measure.

**Table 64 – Estimate of Bias in Reporting of HEDIS 2006 Measures**

Measure	Estimate of Bias	Direction of Estimate
Well-Child Visits in Third, Fourth, Fifth and Sixth Years of Life	0.65%	Overestimate
Follow- Up After Hospitalization (7 days)	6.30%	Overestimate
Follow-Up After Hospitalization (30 days)	6.17%	Overestimate
Prenatal and Postpartum Care (Prenatal)	None	
Prenatal and Postpartum Care (Postpartum)	None	

### Final Audit Rating

The Final Audit Rating for each of the performance measures was based on the findings from all data sources summarized in the Final Performance Measure Validation Worksheet for each measure. Table 65 (see below) shows that the Prenatal and Postpartum Care measure was Fully Compliant. The rate for the Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life and Follow-Up After Hospitalization for Mental Illness measures were overestimated, but fell within the confidence intervals reported by the MCO.

**Table 65 – Final Audit Rating for Performance Measures**

Measure	Final Audit Rating
Well-Child Visits in Third, Fourth, Fifth and Sixth Years of Life	Substantially Compliant
Follow- Up After Hospitalization (7 days)	Substantially Compliant
Follow-Up After Hospitalization (30 days)	Substantially Compliant
Prenatal and Postpartum Care (Prenatal)	Fully Compliant
Prenatal and Postpartum Care (Postpartum)	Fully Compliant

Note: Fully Compliant = Measure was fully compliant with State specifications; Substantially Compliant = Measure was substantially compliant with State specifications and had only minor deviations that did not significantly bias the reported rate; A significant bias in the rate was defined as a number calculated by the EQRO that fell outside the 95% confidence interval of the rate reported by the MCO. Not Valid = Measure deviated from State specifications such that the reported rate was significantly biased. This designation is also assigned to measures for which no rate was reported; Not Applicable = No MC+ Members qualified for the measure.

## CONCLUSIONS

All but one of the MCO's performance measure reported rates were consistent with the average for all MC+ MCOs.

## QUALITY OF CARE

HealthCare USA's calculation of the HEDIS 2006 Follow-Up After Hospitalization for Mental Illness measure was substantially compliant with specifications. This measure is categorized as an Effectiveness of Care measure and is designed to measure the effectiveness/quality of care delivered. HCUSA's rate for this measure was consistent with the average for all MC+ MCOs. Thereby, HCUSA's members are receiving the quality of care for this measure consistent with the care delivered to all other MC+ members. The EQRO was able to validate this rate within the reported 95% confidence intervals and thereby has confidence in the calculated rate.

## ACCESS TO CARE

The MCO's calculation of the HEDIS 2006 Prenatal and Postpartum Care measure was fully compliant. This measure is categorized as an Access/Availability of Care measure and is designed to measure access to the care defined. The MCO's reported rate for this measure (Prenatal Care) was consistent with the average for all MC+ MCOs. Thereby, HCUSA's members are receiving the access to care for this measure consistent with the care delivered to all other MC+ members. The MCO's reported rate for this measure (Postpartum Visits) was significantly lower than the average for all MC+ MCOs. Thereby, HCUSA's members are receiving access to care for this measure at a lower rate than other MC+ members. The EQRO was able to fully validate the rate reported by the MCO for this measure and therefore is extremely confident in the MCO's reported rate.

## TIMELINESS OF CARE

The MCO's calculation of the HEDIS 2006 Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life measure was substantially compliant. This measure is categorized as an Use of Services measure and is designed to measure the timeliness of care received. The MCO's reported rate for this measure was consistent with the average for all MC+ MCOs. Thereby, HCUSA's members are receiving the timeliness of care for this measure consistent with the care delivered to all other MC+ members. The EQRO was able to validate this rate within the reported 95% confidence intervals and thereby has confidence in the calculated rate.

## RECOMMENDATIONS

1. Ensure that all data submitted to the EQRO for review is in the proper format and that files contain all the necessary components in order to be validated.
2. The MCO's Prenatal and Postpartum Care (Rate of Postpartum Visits) was significantly lower than the average rate for all MC+ MCOs. The EQRO recommends the MCO concentrate efforts to improve this rate.
3. The MCO should consider the use of medical record review (when allowed by HEDIS specifications) as a way to improve reported rates.

## 7.3 Validation of Encounter Data

### FINDINGS

The findings for the encounter data validation are organized according to the encounter data evaluation questions presented in the Technical Methods section for the encounter data validation in the aggregate report. Please refer to the main report for detailed objectives, technical methods and procedures for encounter data validation.

#### **What is the Baseline Level of Completeness, Accuracy, and Reasonableness of the Critical Fields?**

For the Medical claim type, there were 355,368 encounter claims paid by the SMA for the period July 1, 2006 through September 30, 2006.

The Outpatient Claim Type field was 100.00% complete, accurate and valid.

The Outpatient Recipient ID field was 100.00% complete, accurate and valid.

The Outpatient First Date of Service field was 100.00% complete and accurate, and valid.

The Outpatient Last Date of Service field was 100.00% complete and accurate, and valid.

The Outpatient Units of Service field was 100.00% complete, accurate and valid.

The Outpatient Procedure Code field was 100.00% complete and accurate, and 100.0% valid (with rounding). The following are the three invalid entries found.

Frequency	Code
2	99261
1	96100

The Outpatient Place of Service field was 100.00% complete, accurate and valid.

The first Diagnosis Code field was 100.0% complete, accurate and 99.99% valid. The remaining fields (19) were blank (incomplete, inaccurate, and invalid).

Although the second through fifth Diagnosis Code fields are optional according to the Health Plan Record Layout Manual, the second, third, fourth, and fifth Diagnosis Code fields fell well below the 100.00% threshold set by the SMA for completeness, accuracy and validity. The Diagnosis Code fields were 13.82%, 6.48%, 2.04%, and 0.00% complete, accurate and valid respectively. All the remaining fields were blank (incomplete, inaccurate, and invalid).

For the Dental claim type, there were 57,125 encounter claims paid by the SMA for the period July 1, 2006 through September 30, 2006. All fields examined except the first and fifth diagnosis

code were 100.00% complete, accurate and valid. The first and fifth Diagnosis Code fields were 0.00% complete, accurate and valid. All the fields were blank.

For the Home Health claim type, there were zero (0) encounter claims paid by the SMA for the period July 1, 2006 through September 1, 2006.

For the Inpatient claim type, there were 51,030 encounter claims paid by the SMA for the period July 1, 2006 through September 1, 2006.

The Inpatient Claim Type field was 100.00% complete, accurate and valid.

The Recipient ID field was 100.00% complete, accurate and valid.

The Admission Type field was 100.00% complete, accurate and valid.

The Admission Date field was 100.00% complete and accurate, and 99.84% valid. There were 81 invalid dates. The following are the 81 invalid dates found.

Frequency	Date
19	08/18/05
28	09/13/05
34	01/25/06

The Discharge Date field was 100.00% complete with the correct number of characters (size).

The correct type of information (date format) was present 97.82% (with 1,111 entries of “99999999”); thereby the Discharge Date field was 97.82% accurate and valid.

The Bill Type field was 100.00% complete, accurate and valid.

The Patient Status field was 100.00% complete and accurate, and valid.

The first Diagnosis Code field was 99.91% complete, accurate and valid. The remaining fields (46) were blank (incomplete, inaccurate, and invalid).

Although the second through fifth Diagnosis Code fields are optional according to the Health Plan Record Layout Manual, the second, third, fourth, and fifth Diagnosis Code fields fell below the 100% threshold for completeness, accuracy, and validity established by the SMA (99.64%, 98.98%, 88.88%, and 71.70%, respectively).

The First Date of Service field was 100.00% complete and accurate, and valid.

The Last Date of Service field was 100.00% complete and accurate, and valid.

The Revenue Code field was 99.90% complete, accurate, and valid. There were 51 invalid blank fields.

The Units of Service field was 100.00% complete, accurate and valid.

For the Outpatient Hospital claim type, there were 188,328 encounter claims paid by the SMA for the period July 1, 2006 through September 30, 2006.

The Outpatient Claim Type field was 100.00% complete, accurate and valid.

The Recipient ID field was 100.00% complete, accurate and valid.

The First Date of Service field was 100.00% complete, accurate and valid.

The Last Date of Service field was 100.00% complete, accurate and valid.

The Units of Service field was 100.00% complete, accurate and valid.

The Outpatient Procedure Code field was 100.00% complete, accurate, and 36.68% valid. There were 115,396 invalid entries of “00000”, 81 invalid entries of “00915” and 1 entry of “Z1922”.

The first Diagnosis Code field was 100.00% complete, accurate and valid.

Although the second through fifth Diagnosis Code fields are optional according to the Health Plan Record Layout Manual, the second, third, fourth, and fifth Diagnosis Code fields fell below the 100% threshold for completeness, accuracy, and validity established by the SMA (99.97%, 99.95%, 55.85%, and 27.60%, respectively).

For the Pharmacy claim type, there were 239,859 claims paid by the SMA for the period July 1, 2006 through September 30, 2006. All fields examined were 100.00% complete, accurate and valid.

## **What Types of Encounter Claim Data are Missing and Why?**

Based on the above analysis of the accuracy, completeness, and validity of the data in the SMA encounter claims extract file for HealthCare USA, an error analysis of the invalid entries was conducted for fields which were lower than the 100.00% threshold specified by the SMA. There were very few errors encountered in the critical fields examined across all claim types. The Inpatient claim type contained invalid data in the Admission Date, Discharge Date, and First Diagnosis Code fields. The Revenue Code field contained 51 blank entries. For the Outpatient Hospital claim type, the Outpatient Procedure Code fields contained invalid entries. The Dental claim type contained invalid data in all fields of the first Diagnosis Code field (all fields were blank).

## **What is the Level of Volume and Consistency of Services?**

When comparing the rate of encounter claim types per 1,000 members, the rates of all encounter claim types were consistent with the average for all MC+ MCOs. This suggests

average rates of encounter data submission and good access to preventive and acute care. This could also be a function of the fact that HCUSA has the greatest number of encounter claims processed for all plans and thereby the outliers (if there are any) are not as prominent.

**To what Extent do the Claims in the State Encounter Claims Database Reflect the Information Documented in the Medical Record?**  
**What is the Fault/Match Rate between State encounter Claims and Medical Records?**

To examine the degree of match between the SMA encounter claims database and the medical record, 100 encounters from each MC+ MCO were randomly selected from all claim types for the period of July 1, 2006 through September 30, 2006 for medical record review.

Of the 891,710 encounter claim types in the SMA extract file for July 1, 2006 through September 30, 2006, 100 encounters were randomly selected. Providers were requested to submit medical records for review. There were 98 medical records (98%) submitted for review. Encounters for which no documentation was submitted were unable to be validated. The match rate for procedures was 81.33%, with a fault rate of 18.67%. The match rate for diagnoses was 84.0%, with a fault rate of 16.0%. The match rate for name of drug dispensed was 96.0%, with a fault rate of 4.0%. The match rate for quantity of drug dispensed was 84.0%, with a fault rate of 16.0%.

**What Types of Errors Were Noted?**

An error analysis of the errors found on the medical record review for procedure, diagnosis, name of drug dispensed, and quantity of drug dispensed was conducted. For the diagnosis code in the medical record, the reasons for diagnosis codes not matching the SMA extract file were missing information ( $n = 12$ ). The diagnosis code listed was not found in the record.

For the procedure code in the medical record, the reasons for procedure codes in the SMA extract file not being supported by documentation in the medical record were missing information ( $n = 12$ ). Examples of missing information included no code; codes listed that were not supported, or codes that did not match the procedure description.

For the name of drug dispensed in the medical record, the reasons for drug names or NDC in the SMA extract file not being supported by documentation in the medical record were missing information (n = 1). No drug name or NDC was found in the records received by the EQRO.

For the quantity of drug dispensed in the medical record, the reasons for quantity of drug in the SMA extract file not being supported by documentation in the medical record were missing information (n = 4). No quantity was found in the records received for review by the EQRO.

### **To what extent do the MC+ MCO paid/unpaid encounter claims match the SMA paid database?**

Since HealthCare USA included internal control numbers that matched those of the SMA, the planned analysis of comparing MC+ MCO encounter data to the SMA encounter claim extract file was performed. The SMA defined “unpaid claims” as those claims that the MCO denied for payment, unpaid claims do not include claims paid via a capitation plan.

For the Pharmacy Claim type, all encounter data submitted to the EQRO (n = 239,859) was of “paid” status. For the Dental Claim type, all encounter data submitted to the EQRO (n=57,125) was of “paid” status. For both claim types, there were no unmatched claims that were in the HCUSA encounter file and absent from the SMA data. Thus, 100.00% of the HCUSA submitted encounters matched with the SMA encounter records.

For the Outpatient Medical Claim Type (n= 355,368), 222 “denied” claims were submitted by HCUSA but all other encounter claims were of “paid” status. For the Outpatient Hospital Claim Type (n = 188,328), 15 “denied” claims were submitted by HCUSA but all other encounter claims were of “paid” status. Of the encounter claims submitted by HCUSA, 88 records were unmatched with the SMA encounter data. There was a “hit” rate of 99.99% between HCUSA encounter claims and the SMA encounter data.

For the Inpatient Claim Type, HCUSA submitted 51,030 encounter claims. Only 87 of these encounter claims were of “denied” status; all other claims were of “paid” status. There were 10 unmatched records between HCUSA and the SMA, yielding a 99.99% “hit” rate.

## **Why are there unmatched claims between the MC+ MCO and SMA data files?**

For all claim types, the unmatched encounters were missing ICN numbers which are required to match the encounter to that of the SMA. Therefore, there were no documented “missing” claims from the SMA database.

## **What are the Data Quality Issues Associated with the Processing of Encounter Data?**

While the MC+ MCO did submit the data in the requested format (including most ICN numbers), there are a number of ways to improve the data quality by improving the database system. As the Internal Control Number is only assigned by the State database when a claim is paid, it is difficult to match the MC+ MCO data of “unpaid” and “denied” claims to the SMA data. As the Internal Control Number is unique only to the encounter, the ICN may be represented in multiple lines of data. To match the MC+ MCO data to the SMA data to specific fields, this requires a unique line number. Therefore each service provided within an encounter would have a separate line of data with a unique line identifier.

### **STRENGTHS**

1. All encounter data was submitted in the specified format and included internal control numbers (ICNs) which allowed the EQRO to conduct planned comparisons of the MC+ MCO and SMA data files.
2. The critical field validation of all six claim types resulted in few fields under the SMA established threshold of 100.00% accuracy, completeness, and validity.
3. The critical fields examined for the Dental and Pharmacy claim types were 100.00% complete, accurate and valid.
4. The match rate for procedures, diagnoses, drug quantity, and drug name between the SMA encounter claims extract file and the medical records for HealthCare USA were significantly higher than the average for all MC+ MCOs.

### **AREAS FOR IMPROVEMENT**

1. For the Medical claim type, there were invalid entries for the first Diagnosis fields.
2. For the Inpatient claim type, there were invalid entries for the Discharge Date fields.
3. For the Inpatient claim type there were inaccurate and invalid entries for Admission Date.
4. For the Inpatient claim type there were incomplete, inaccurate and invalid entries for the first Diagnosis Code fields.

5. For the Outpatient Hospital claim type, there were invalid data in the Outpatient Procedure Code field.
6. The MCO reported no Home Health encounter claims during the review period.

## RECOMMENDATIONS

1. Examine and revise as needed internal system edits for invalid procedure codes in the NSF/CMS 1500 file layout for the Outpatient Procedure Code and run validity checks after the programming of new edits.
2. Ensure that Admission Date, Discharge Date, and Diagnosis fields are complete and valid for the Inpatient (UB-92) claim types, and institute error checks to identify invalid data.



## 7.4 MCO Compliance with Managed Care Regulations

### METHODS

Prior to the site visit, documentation was received and reviewed regarding the MCO's compliance with the State contract. The External Quality Review Organization (EQRO) reviewed contract documents with the staff of the Division of Medical Services (DMS). On-site review time was used to conduct interviews with those who oversee the daily practices of the MCO. This ensures that documentation is developed and practices occur within the scope of the contract and in a manner that meets or exceeds federal regulations.

A detailed protocol (BHC MCO Compliance Review Scoring Form) was utilized to ensure that all the elements of the federal regulations were addressed in the review process. Additionally, an interview tool was constructed to validate practices that occur at the MCO and to follow-up on questions raised from the document review and from the 2004 and 2005 External Quality Review. Document reviews occurred on-site to validate that practices and procedures were in place to guide organizational performance.

### Document Review

The Division of Medical Services supplied:

- State of Missouri Contract Compliance Tool (including DMS responses and comments)

The following documents were requested for on-site review:

- Member Handbook
- Provider Handbook
- 2006 Marketing Plan and Materials
- Prior Authorization Time Frames/Policy/Processes
- Policy Tracking Log
- Staff Training Records
- Credentialing Policies and Audit Reports
- Opt Out Listings
- Denial Logs
- Grievance Logs (Members and Providers)
- Grievances and Appeals related to members were reviewed, as were Complaints, Grievances, and Appeal files for providers. These files were obtained from a random selection process of actions filed in the first quarter of 2005.

- 2005 Annual Quality Improvement Program Evaluation

Additional documentation made available by HealthCare USA included:

- Marketing Plan and Educational Material Development Policy
- HCUSA of Missouri Organizational Chart
- Beary Important Bundle Incentive Program Information
- Obesity Performance Improvement Project 2006
- Mental Health Network, Inc – 2006 Quality Improvement Work Plan

## **Interviews**

Interviews were conducted with the following group:

### **Plan Administration**

Jackie Inglis, VP Health Services

Nancy Marshall, MD, Medical Director

Carl Bynum, DO, Medical Director

Frank Siano, VP Community and Governmental Relations

Resmi Jacob-Schrieber, Director of Provider Relations

Pam Victor, Director of Government Relations and Regional Compliance -- Central

Gene Poisson, Director of Network Development

Deb Fitzgerald, Director of Health Services

### **Mental Health**

Rick Littell, MHNet

Susan Norris, MHNet

Jackie Inglis, HCUSA

Gene Poisson, HCUSA

## **FINDINGS**

### **Enrollee Rights and Protections**

A strong commitment to member rights continues to be a cornerstone of HealthCare USA's service philosophy. Quality services to members, with a particular emphasis on families and children, were observed within the organization. HealthCare USA views cultural diversity as an essential component of their interactions with members. The MCO maintains cultural diversity as a cornerstone of initial and ongoing staff training. HealthCare USA employed staff that spoke different languages and is able to provide written materials in languages other than English. Maintaining the ability to serve a culturally diverse population with a variety of special service needs is exhibited in the MCO's approach to their work and to their interactions with members.

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HealthCare USA has expanded their ability to communicate with visually and reading impaired members by contracting to produce their member handbook and other materials into Braille and on CD. They have information translated into other languages as well.

The MCO has continued efforts during the past year to impact members experiencing high risk pregnancies or with a history of premature birth. HealthCare USA reports that their members are producing 850 births per month. A percentage of these babies go to the neonatal intensive care unit (NICU), and a percentage experience congenital birth defects. The MCO is making every attempt to identify women at risk by using the Global Risk Assessment scale at the onset of pregnancy. However, this was not identifying problems that some women experienced later during pregnancy. They have piloted a project whereby providers send in postcards to the MCO if they identify a situation change for a pregnant woman that increases her risk for problems or premature birth. Cards are also requested from physicians who have a teen patient that becomes pregnant. A part-time Medical Director was employed to work with case management and utilization management staff to target these members and ensure that they receive adequate services. High risk pregnancies receive the most intensive level of case management. They are now beginning to do data analysis, including outcome and process measures, for these members. The Medical Director completes “rounds” regularly with these case managers. They visit high volume providers and also send a special OB newsletter to providers. This is assisting the MCO in finding at-risk members and measuring the effectiveness of their interventions.

HealthCare USA is making efforts to leverage community relations to assist them in identifying members with special healthcare needs. They are going to Grace Hill (FQHC) for “grand rounds.” The clinic is also contracted to do “social case management.” They assist members in keeping appointments for prenatal and post partum care, and the MCO provides gift cards, which are validated by the physician’s signature at their visits. This provides encouragement and support to members, and assists in reinforcing the importance of regular preventive healthcare. Community

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initiatives have also begun in the MC+ Western Region. The MCO is working the LINC, the local community partnership group, and the Spanish Center to ensure that they are addressing the needs that might be peculiar to the Kansas City population. They are working with community groups in the MC+ Central Region to address issues specific to the rural population. One example is that HealthCare USA providers are conducting dental screens at community based activities.

The case managers are making special efforts to make frequent telephone contacts with their members. They have been trained in patient-centered interviewing. The MCO is continuing to investigate how to evolve the case management process to become interactive rather than reactive. The MCO is attempting to create an atmosphere that supports members, while focusing on member responsibility and independence.

Beginning in September 2007 the MCO will utilize students from the Chamberlain School of Nursing and Community Health. They hope to enhance these individual's case management skills, while expanding the capacity of the MCO in providing expanded case management services.

Another project that the MCO has been working on is a pilot with AT&T and the local Human Development Corporation. This is occurring in the Eastern Region with a goal of obtaining information on effectiveness. They are tracking voice mails to assist in locating members and ensuring that they have the most current contact information available. The MCO believes that this has been effective to date. They only have this capacity in the 314 area code at this time, but plan to expand when the telephone company system supports it.

As a follow-up on their asthma initiatives, the MCO provided information on a project that is occurring in all three MC+ Regions. The MCO monitors member adherence to physician visits and medication. When a member does visit their physician or pharmacy, they are asked to verify all contact information and future commitment to keeping

appointments. After attending so many appointments, they receive a gift card, with information on “Kids’ Health” aimed at parents, teens, and younger children.

HealthCare USA was also asked about their EPSDT program as a follow-up from the previous review. The update provided information that members in all three regions receive reminders and post cards. The MCO staff conducts record reviews. Coventry, the MCO parent company, has developed reminder letters that are generated automatically to ensure that appointment reminders are sent to members on a regular basis.

The MCO has developed and is utilizing a Member Advisory Committee in all three MC+ Regions.

The MCO does have case management staff actually located in all three MC+ Regions. They utilize the Health Risk Assessment received through the SMA as much as possible. The MCO reports that community connections, particularly in the rural areas, and provider referrals are more effective in identifying members with special health care needs.

Ratings of compliance with Enrollee Rights and Protections (100%) indicate that HealthCare USA made a concerted effort to improve their compliance in this area. The MCO completed all required policies and these were approved by the SMA. Interviews with administrative staff indicated a commitment to attend to the details of completing required policies and maintaining this level of success. The MCO had a stated goal of 100% compliance with SMA contract requirements and federal regulations, which was achieved.

**Table 66 – Subpart C: Enrollee Rights and Protections Yearly Comparison (HealthCare USA)**

<b>Federal Regulation</b>	<b>HealthCare USA</b>		
	<b>2004</b>	<b>2005</b>	<b>2006</b>
438.100(a) Enrollee Rights: General Rule	1	2	2
438.10(b) Enrollee Rights: Information Requirements	1	1	2
438.10(c)(3) Alternative Language: Prevalent Language	2	2	2
438.10(c)(4,5) Language and Format: Interpreter Services	1	1	2
438.10(d)(1)(i) Information Requirements: Format/Easily Understood	2	2	2
438.10(d)(1)(ii)and (2) Information Requirements: Format Visually Impaired, and Limited Reading Proficiency	1	2	2
438.10(f) Information for All Enrollees: Free Choice, etc.	1	1	2
438.10 (g) Information to Enrollees: Specifics/Physician Incentive Plans	2	2	2
438.10(i) Special Rules: Liability for Payment/Cost Sharing	1	1	2
438.100(b)(2)(iii) Enrollee Rights: Provider-Enrollee Communications	2	2	2
438.100(b)(2)(iv,v) Rights to Refuse Services/Advance Directives	1	2	2
438.100(b)(3) Right to Services	1	2	2
438.100(d) Compliance with Other Federal/State Laws	2	2	2
Number Met	5	9	13
Number Partially Met	8	4	0
Number Not Met	0	0	0
Rate Met	38.5%	69.2%	100%

Note: 0 = Not Met; 1= Partially Met; 2 = Met

Sources: Department of Health and Human Services Centers for Medicare & Medicaid Services (2003). Monitoring Medicaid Managed Care Organizations (MCOs) and Prepaid Inpatient Health Plans (PIHPs): A protocol for determining compliance with Medicaid Managed Care Proposed Regulations at 42 CFR Parts 400, 430, et al. Final Protocol Version 1.0.; BHC, Inc., 2004 External Quality Review Monitoring MCOs Protocols.

## Behavioral Health

Individuals from the behavioral health subcontractor, MHNet, were interviewed at the on-site review. The MHNet staff shared information regarding a number of initiatives undertaken during 2006. One project involved the support of members through targeted follow-up when they are discharged from inpatient treatment. Another measure focused on avoiding weekend discharges for members requiring inpatient treatment. MHNet's goal was to have the member ready for discharge prior to Saturday to avoid weekend emergencies.

The Behavioral Health Organization's (BHO) system was undergoing enhancement to capture baseline information on members receiving behavioral health services. MHNet

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continues the practice of authorizing family therapy, in addition to required individual therapy, for all children under age 21 who need behavioral health services. The BHO believes that this additional resource will assist in ensuring that the family had an understanding of issues facing their child, that the entire family would be working together to ameliorate problems, and that the family would understand the child's emotional functioning. The BHO works closely with HealthCare USA to identify expectant mothers to ensure that required behavioral health services were in place in an effort to prevent post partum problems. The BHO has also made a concerted effort to ensure that information and educational material is translated into different languages. Multilingual providers are available to members.

The MCO has made a concerted effort to offer adequate case management services. They provide case management to any member requiring a hospital admission, who attempts suicide, during and immediately after pregnancy, who has a history of non-compliance, and/or those with serious disease management issues. Case managers maintain regular phone contacts to ensure coordinated and necessary services and supports, such as transportation, are in place. The BHO relates that they are making an effort to keep primary care physicians informed. The feedback they have received is that the PCPs are surprised and appreciate these coordination efforts.

MHNet has developed a number of other tools to support the members they serve. These include: a guide for parents who have children with autism; a program for treatment of obesity; targeted services for children diagnosed with Attention Deficit Hyperactivity Disorder; and a newsletter with information for pregnant and post partum members. The BHO recognizes that differences exist in the three MC+ Regions and has worked with the respective Community Mental Health Clinics and C-STAR programs to develop strong working relationships. These groups are invited to meetings every two to three months to discuss current issues, meet staff, and to develop strong organizational relationships.

## Quality Assessment and Performance Improvement

### Access Standards

HealthCare USA worked with both members and providers to ensure proper access to services was available. They developed a large provider network throughout all three MC+ Managed Care Regions, and continued to recruit providers to expand services available, particularly in the Central Missouri area. This enabled members to have an adequate choice for both PCPs and specialty providers. The MCO does authorize the use of out-of-network providers when this will best meet a member's healthcare needs.

One of the MCO's efforts during 2006 was to recruit dental providers. They have had some success, but relate that this is an ongoing initiative. They made an effort to work with providers who were not traditionally Medicaid vendors. With receipt of appropriate medical background information, these providers have accepted MCO members. The dental subcontractor, Doral Dental, placed a provider representative in the Central Region to ensure ample recruitment occurred and that a representative was available locally to assist in problem solving when this was required. Doral Dental initiated a work plan to obtain additional providers. HealthCare USA Provider Relations worked with Doral to ensure that the subcontractor had assistance as needed. Special attention was given to the issue of transportation while this network development continues. The MCO paid for mileage when a member had a vehicle, or another method of transportation to attend dental appointments, when they occurred at an excessive distance. This assisted in increasing the availability of services. Another method utilized by the MCO was negotiating an alternative fee schedule for providers reluctant to participate due to reimbursement issues. HealthCare USA reported that the network did improve, but they continue to concentrate on development efforts.

The MCO continues its efforts to monitor their provider network for accessibility and availability of both primary care physicians and specialists in all three MC+ Regions. The MCO makes an effort on behalf of members to share information about changes in provider availability, and to provide assistance in making appointments or identifying an appropriate provider if necessary. The MCO is also participating in member events, such as Back to School Fairs, to provide information about the availability and accessibility of services. In the Western Region, the FQHC, Swope Health Services, is providing school physicals, dental screenings, and vision screenings for children. HIV screens and mammograms are provided for adults. The

screens coordinated with Swope Health Services are available to all children, whether or not they are MCO members. If a child is not a HealthCare USA member pertinent information is forwarded to the appropriate MC+ MCO. Several smaller fairs and events occurred in the MC+ Central Region. One of these events is scheduled for Boone and one in Callaway Counties. Additionally the MCO will be involved in 38 other events in the MC+ Central Region. In the Eastern MC+ Region the MCO is scheduled to participate with over fifty vendors in North St. Louis City and South St. Louis County.

The MCO participates in baby showers that are held at the FQHCs in all three MC+ Regions. Babies 'R Us was included in the Western MC+ Region to provide seminars and informational information to parents. These occurred at the Sam Rogers and Swope Health Services clinics.

Ratings of compliance with Access Standards regulations (100%) reflect the fact that all HealthCare USA policies have been submitted, reviewed, and approved by the SMA. The MCO has improved in this area each year, and continues to strive to meet all required SMA contract requirements and federal regulations.

**Table 67 – Subpart D: Quality Assessment and Performance Improvement: Access Standards Yearly Comparison (HealthCare USA)**

Federal Regulation	HealthCare USA		
	2004	2005	2006
438.206(b)(1)(i-v) Availability of Services: Provider Network	2	2	2
438.206 (b) (2) Access to Well Woman Care: Direct Access	2	2	2
438.206(b)(3) Second Opinions	2	2	2
438.206(b)(4) Out of Network Services: Adequate and Timely Coverage	1	2	2
438.206(b)(5) Out of Network Services: Cost Sharing	1	1	2
438.206(c)(1)(i-vi) Timely Access	1	1	2
438.206(c)(2) Provider Services: Cultural Competency	2	2	2
438.208(b) Care Coordination: Primary Care	2	2	2
438.208(c)(1) Care Coordination: Identification	1	1	2
438.208(c)(2) Care Coordination: Assessment	2	2	2
438.208(c)(3) Care Coordination: Treatment Plans	1	1	2
438.208(c)(4) Care Coordination: Direct Access to Specialists	2	2	2
438.210(b) Authorization of Services	1	2	2
438.210(c) Notice of Adverse Action	1	1	2
438.210(d) Timeframes for Decisions, Expedited Authorizations	2	2	2
438.210(e) Compensation of Utilization Management Activities	2	2	2
438.114 Emergency and Post-Stabilization Services	1	1	2
Number Met	9	11	17
Number Partially Met	8	6	2
Number Not Met	0	0	0
Rate Met	52.9%	64.7%	100%

Note: 0 = Not Met; 1= Partially Met; 2 = Met

Sources: Department of Health and Human Services Centers for Medicare & Medicaid Services (2003). Monitoring Medicaid Managed Care Organizations (MCOs) and Prepaid Inpatient Health Plans (PIHPs): A protocol for determining compliance with Medicaid Managed Care Proposed Regulations at 42 CFR Parts 400, 430, et al. Final Protocol Version 1.0.; BHC, Inc., 2004 External Quality Review Monitoring MCOs Protocols.

### Structures and Operation Standards

HealthCare USA instituted a number of measures to improve practice in this area in 2005 that continued during 2006. The MCO holds quarterly oversight meetings with all subcontractors in each region to discuss service provision issues and to monitor activities. The meetings are used to monitor key performance indicators and to review provider panels. Annual evaluations are completed on each subcontractor, and daily contact is maintained. HealthCare USA reported this increased contact and monitoring allowed them to address administrative and member issues in a timely and effective manner.

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On-site reviews were also conducted during 2006 to assess their use of practice guidelines, and to review that all required documentation was in place. This has been effective in ensuring the quality and timely provision of care.

HealthCare USA created a provider advisory group, which is currently functioning in the Eastern MC+ Region, but will soon be operational in all three MC+ Managed Care regions. The committee is made of high volume providers and representatives from across specialties. The sharing of ideas and information pertaining to any member dissatisfaction is encouraged. These groups seek provider feedback and provide information in a framework that allows the MCO to develop a true partnership with their provider network.

The MCO is performing credentialing audits following URAC and NCQA standards. The MCO policies and procedures were reviewed and were in compliance with both the SMA contract requirements and the federal regulations. Eleven delegated entities were reviewed in 2006 and all met the standard of 80% or above compliance. Seven of the entities reviewed were found to be 100% compliant. The audit report for Peoples' Health Center was reviewed. The Center did meet the 80% acceptance for compliance. A letter was sent informing the FQHC of the findings that also made specific recommendations for additional policies.

Ratings for compliance with Structure and Operation Standards (100%) reflected completed and approved policy and procedures in this area.

**Table 68 – Subpart D: Quality Assessment and Performance Improvement:: Structure and Operation Standards Yearly Comparison (HealthCare USA)**

Federal Regulation	HealthCare USA		
	2004	2005	2006
438.214(a,b) Provider Selection: Credentialing/Recredentiaing	2	2	2
438.214(c) and 438.12 Provider Selection: Nondiscrimination	2	2	2
438.214(d) Provider Selection: Excluded Providers	2	2	2
438.214(e) Provider Selection: State Requirements	2	2	2
438.226 and 438.56(b)(1-3) Disenrollment: Requirements and limitations	1	1	2
438.56(c) Disenrollment Requested by the Enrollee	1	1	2
438.56(d) Disenrollment: Procedures	1	1	2
438.56(e) Disenrollment: Timeframes	2	2	2
438.228 Grievance System	2	2	2
438.230(a,b) Subcontractual Relationships and Delegation	1	1	2
Number Met	6	6	10
Number Partially Met	4	4	0
Number Not Met	0	0	0
Rate Met	60.0%	60.0%	100%

Note: 0 = Not Met; 1= Partially Met; 2 = Met

Sources: Department of Health and Human Services Centers for Medicare & Medicaid Services (2003). Monitoring Medicaid Managed Care Organizations (MCOs) and Prepaid Inpatient Health Plans (PIHPs): A protocol for determining compliance with Medicaid Managed Care Proposed Regulations at 42 CFR Parts 400, 430, et al. Final Protocol Version 1.0.; BHC, Inc., 2004 External Quality Review Monitoring MCOs Protocols.

### **Measurement and Improvement**

The MCO continued to use InterQual as a guide for decision-making in terms of utilization review. InterQual criteria was originally cited when asked about practice guidelines. The MCO has instituted a number of practice guidelines and has instituted a number of initiatives to ensure their distribution to and use by providers. HealthCare USA's new Medical Director does ensure that monitoring utilization of practice guidelines is occurring at the provider level.

HealthCare USA continued to have a well developed internal written quality assessment and improvement program. The MCO shared their Quality Management Charter and minutes from meetings. The Quality Management Program focused on monitoring, assessment, and evaluation of clinical and non-clinical service delivery. The result has been the implementation of quality programs that targeted members with special healthcare needs, but also provided enhanced services to all members. HealthCare USA indicated that they recognized the need to stratify data by MC+ Medicaid Managed Care region. The Quality Management charter ensured that

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meetings occur at least quarterly on a regular schedule and had representatives from all sections of the organization, as well as including providers. The quality management process ensured that the MCO maintained a record of activities, recommendations, accomplishments, and follow-up.

Through the administrative method, the MCO did report data for Validating Performance Measures.

The MCO did submit clinical and non-clinical Performance Improvement Projects. The details of the audit are located in the appropriate section of this report. The MCO continued to operate a health information system that meets required standards. Encounter data was submitted in the format requested so that appropriate validation could occur. The details of this process are located in the Validating Encounter Data section of this report.

Ratings for compliance with Measurement and Improvement regulations (100%) reflect the completion of all policy and procedures in this area. The MCO did submit all data in requested formats, allowing the proper validation process to occur.

**Table 69 – Subpart D: Quality Assessment and Performance Improvement: Measurement and Improvement Yearly Comparison (HealthCare USA)**

Federal Regulation	HealthCare USA		
	2004	2005	2006
438.236(b)(1-4) Practice Guidelines: Adoption	2	2	2
438.236(c) Practice Guidelines: Dissemination	2	1	2
438.236(d) Practice Guidelines: Application	1	1	2
438.240(a)(1) QAPI: General Rules	2	2	2
438.240(b)(1) and 438.240(d) QAPI: Basic Elements of MCO Quality Improvement and PIPs	1	1	2
438.240(b)(2)(c) and 438.204(c) QAPI: Performance Measurement	2	1	2
438.240(b)(3) QAPI: Basic Elements/Over and Under Utilization	2	2	2
438.240(b)(4) QAPI: Basic Elements regarding Special Healthcare Needs	2	2	2
438.240(e) QAPI: Program Review by State	NA	NA	NA
438.242(a) Health Information Systems	2	2	2
438.242(b)(1,2) Health Information Systems: Basic Elements	1	2	2
438.242(b)(3) Health Information Systems: Basic Elements	1	2	2
Number Met	7	7	11
Number Partially Met	4	4	0
Number Not Met	0	0	0
Rate Met	63.6	63.6%	100%

Note: Regulation 438.240(e) refers to program review by the state. The regulation requires the state to review, at least annually, the impact and effectiveness of each MCO's quality assessment and performance improvement program. The regulation refers to the state QA & I program review process and is not applicable to External Quality Review of the MC+ Managed Care Program. This percent is calculated for the regulations that are applicable to the MC+ Managed Care Program.

0 = Not Met; 1 = Partially Met ; 2 = Met

Sources: Department of Health and Human Services Centers for Medicare & Medicaid Services (2003). Monitoring Medicaid Managed Care Organizations (MCOs) and Prepaid Inpatient Health Plans (PIHPs): A protocol for determining compliance with Medicaid Managed Care Proposed Regulations at 42 CFR Parts 400, 430, et al. Final Protocol Version 1.0.; BHC, Inc., 2004 External Quality Review Monitoring MCOs Protocols.

## Grievance Systems

Rating for compliance with Grievance Systems regulations (100%) indicates that the MCO completed all requirements regarding policy and practice in their grievance system. Out-of-network providers are informed of policies and procedures regarding complaints, grievances and appeals through the Provider Manual and Web Link.

The MCO has resolved to obtain timely grievance resolution for both members and providers. The grievances are placed in their CSO system, which tracks timeframes and generates notices and letters. Specific staff is assigned to appeals for members. They assist in obtaining the most

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complete information to present to an appeals committee. The member is notified by telephone and in writing of the decision to ensure that they have the information as quickly as possible. HealthCare USA utilizes an appeals form for members and does provide assistance with the written request for an appeal.

Six member files for grievance and appeals were reviewed during the on-site review. Four of these were member grievances and two were appeals. All records reviewed were handled appropriately and within prescribed time frames. One member grievance timeframe was extended at the request of the member. The member files were in order and copies of correspondence were included. The files reflected attention to detail and adequate responsiveness to member needs and issues.

Provider complaints, grievances, and appeals were also reviewed on-site. Six files were requested and all appeared to be in order. When possible, situations were resolved at the complaint level. The provider files were complete with correspondence that met all required timeframes. Where appropriate, files contained information that a review occurred by a physician who had not been involved in the original decision, or in a previous level of the grievance process. HealthCare USA had access to physicians through an independent contract who could participate in the review process according to the medical specialty required.



**Table 70 – Subpart F: Grievance Systems Yearly Comparison (HealthCare USA)**

Federal Regulation	HealthCare USA		
	2004	2005	2006
438.402(a) Grievance and Appeals: General Requirements	2	2	2
438.402(b)(1) Grievance System: Filing Requirements - Authority	2	2	2
438.402(b)(2) Grievance System: Filing Requirements - Timing	2	2	2
438.402(b)(3) Grievance System: Filing Requirements - Procedures	2	2	2
438.404(a) Grievance System: Notice of Action - Language and Format	2	2	2
438.404(b) Notice of Action: Content	2	2	2
438.404(c) Notice of Action: Timing	2	2	2
438.406(a) Handling of Grievances and Appeals: General Requirements	2	2	2
438.406(b) Handling of Grievance and Appeals: Special Requirements for Appeals	2	2	2
438.408(a) Resolution and Notification: Basic Rule	2	2	2
438.408(b,c) Resolution and Notification: Grievances and Appeals - Timeframes and Extensions	2	2	2
438.408(d)(e) Resolution and Notification: Grievance and Appeals - Format and Content of Notice	2	2	2
438.408(f) Resolution and Notification: Grievances and Appeals - Requirements for State Fair Hearings	2	2	2
438.410 Expedited Resolution of Appeals	2	2	2
438.414 Information about the Grievance System to Providers and Subcontractors	2	2	2
438.416 Recordkeeping and Reporting Requirements	2	2	2
438.420 Continuation of Benefits while Appeal/Fair Hearing Pends	2	2	2
438.424 Effectuation of Reversed Appeal Resolutions	2	2	2
Number Met	18	18	18
Number Partially Met	0	1	0
Number Not Met	0	0	0
Rate Met	100%	100%	100%

Note: 0 = Not Met; 1 = Partially Met; 2 = Met

Sources: Department of Health and Human Services Centers for Medicare & Medicaid Services (2003). Monitoring Medicaid Managed Care Organizations (MCOs) and Prepaid Inpatient Health Plans (PIHPs): A protocol for determining compliance with Medicaid Managed Care Proposed Regulations at 42 CFR Parts 400, 430, et al. Final Protocol Version 1.0.; BHC, Inc., 2004 External Quality Review Monitoring MCOs Protocols

## Conclusions

HealthCare USA continued to exhibit improvement in completing, submitting and gaining approval of required policy and procedures by the SMA. The MCO made improvements to achieve 100% compliance in all sections of the protocol. The operations and practices revealed during interviews at the on-site review indicated a commitment by HealthCare USA to provide quality healthcare services to its members. MCO activities focused on: enhancing preventative services; creating new approaches to providing access to services such as the development of after-hours clinics; obtaining member input on issues; in engaging provider input into improving

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and delivering services effectively; and responding to prior authorizations and grievances in a timely and efficient manner.

The MCO incorporated methods to track required policy submission into daily administrative practice and took this process seriously. The practice observed at the time of the on-site review provided confidence that the MCO made service to members their primary focus and that there was a commitment to comply with the requirements of the MC+ Managed Care contract and federal regulations.

### **QUALITY OF CARE**

The staff at HealthCare USA exhibits a commitment to excellence that creates an atmosphere where both members and providers experience quality services. The provider relations staff made regular contacts with providers to troubleshoot problems that may be reported by members, and to assist provider staff in making interactions with members and the MCO easier. Efforts within the communities served, involvement with FQHCs, and with Community Mental Health Clinics, are examples of working to produce quality care in the most convenient environment, and working to improve access to care for members. These relationships have also allowed education to occur that improves the quality of services for both the member and organizational level.

### **ACCESS TO CARE**

HealthCare USA provided numerous examples of initiatives they are involved in to ensure that members have information on obtaining services and have adequate access to services. Several projects bring providers directly to places where members are available. The MCO has also undertaken provider recruitment and retention efforts that ensure that providers are available to members throughout all three MC+ Regions served.

Internally HealthCare USA, as an organization, has made efforts to ensure interdepartmental integration to create thorough knowledge of their service delivery system thus enabling staff to assist members effectively. Staff exhibited enthusiasm in describing the services they deliver and a desire to ensure that members' healthcare needs are met in spite of the barriers sometimes experienced.

### **TIMELINESS OF CARE**

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The MCO was able to complete all required policies and procedures in a timely manner, to ensure compliance with State contract requirements and federal regulations. This effort reflects the attention needed to be able to focus on member service needs. HealthCare USA has also initiated a number of practices that enhanced timely response and resolution of grievances and appeals for both members and providers. This decision making process enables members to obtain the healthcare they require in a timely manner. The MCO recognizes the importance of timely and adequate services.

## **RECOMMENDATIONS**

1. Maintain the importance of complying with documentation requirements to the same standards as those reflected in the daily practice within the MCO.
2. Continue MCO development in the area of utilization of available data and member information to drive change and support opportunities for organizational growth and development.
3. Continue to track policies and other materials required for annual review.
4. Continue the commitment to oversight of subcontractors, such as MHNet and Doral Dental. Quarterly reviews ensure that member services are at the level the MCO requires.
5. Maintain involvement in community-based services and activities.

## 8.0 Missouri Care



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The previous sections of the 2006 EQRO report present the purpose and objectives, technical methods, procedures for evaluation, and MCO to MCO comparisons of analyses, findings, and recommendations for each of the protocols based on the aggregate analysis. This section of the EQRO report summarizes MC+ MCO specific methods, procedures, findings, and recommendations for improving the quality, timeliness, and access to care for MC+ Managed Care Members. Please refer to the main report for detailed technical objectives, methods, and presentation of data that are referenced here for the MC+ MCO.

## 8.1 Performance Improvement Projects

### METHODS

#### Document Review

Missouri Care supplied the following documentation for review:

- 2006 Increase Appropriate Use of Medications for Members with Persistent Asthma
- 2006 Seven-Day Follow-Up Following Hospitalization for Mental Illness

#### Interviews

Interviews were conducted with the project leaders for each Performance Improvement Project (PIP) by the EQRO team on July 24, 2007 during the on-site review, and included the following:

Tammy Weise – Manager, Quality Management

Dr. Andrew Matera – Chief Medical Officer

Brent Netemeyer – Manager, Operations

Katie Dunne – Senior Quality Coordinator

The interviewees shared information on the validation methods, study design, and findings.

Technical assistance regarding study design and presentation of findings was provided by the EQRO. The following questions were addressed:

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- Who was the Project Leader?
- How was the topic identified?
- How was the study question determined?
- How can the ADHD study question be simplified to get at the actual issue Missouri Care wants to address?
- What were the findings?
- What was the intervention?
- What was the time period of the study?
- Was the intervention effective?
- What does Missouri Care want to study or learn from their PIPs?

The PIPs submitted for validation were not completely mature at the time of the initial request for information. The MCO was instructed during the site visit that they could submit additional information that included outcomes of the interventions. Additional information was received for the PIP, Appropriate Use of Asthma Medications.

## FINDINGS

The first PIP evaluated was, “Increasing the Appropriate Use of Medications for Members with Persistent Asthma.” This PIP was identified as a clinical project.

The rationale for identifying this topic of study was well documented in the information presented. The topic was justified in terms of providing sound local and national literature and research supporting the assertion that it would improve health outcomes for MC+MCO members. It included information on the population and provided a strong argument for choosing this topic for a performance improvement project. The overarching goal of the project was clearly focused on correcting deficiencies in health care services. To accomplish this goal the PIP project planned to work with primary care providers to assist members in using controller medications, to decrease the need for more invasive medical interventions.

The study question presented was, “Will mailing primary care providers quarterly rosters of their assigned members who have persistent asthma, but who are not on controller medications, increase the rate of members being dispensed the appropriate medications?” The

presentation of the study questions provided an understanding of the basis of the study and planned interventions. The question and supporting information provided confidence in the proposed methodology and anticipated outcomes. The wording of the question does limit the PIP in entertaining new or expanded interventions for future work on this subject.

The definitions of each indicator were linked to the study question and were based on specific HEDIS measures defining goals for this project. The objectives were clearly identified and well-defined. The indicators were set up to improve treatment of members with persistent asthma. The MC+MCO did define their population based on HEDIS technical specifications. Any member over two years of age is eligible, unless their diagnosis included emphysema or COPD. The PIP included a rationale for excluding these members. These members were not excluded to prevent additional services to those with special health care needs.

The study design clearly identified the data to be collected and the sources of this data. Time frames for collection and analysis were included in enough detail to give confidence in the methodology used. A prospective data analysis plan was described in detail, including all planned analysis and a prospective look at the definition of success of the intervention. The plan includes the methodology for obtaining a 95% confidence level in all data obtained and evaluated. Information on staff involved, their roles, and qualifications were included in sufficient detail.

All planned interventions were described in enough detail to ensure a thorough understanding of the rationale presented, and to create confidence in the expected outcomes to be achieved by this study. The study narrative did include a baseline data measurement and results for the first remeasurement phase of the project. The results indicated a significant increase compared to the baseline statistics. The results in most cases did not reach the benchmark set by the MC+MCO, based on acceptable HEDIS rates for the measures involved. However, it did provide confidence that the interventions being employed were having a positive impact of the quality of care received by members.

The second PIP evaluated was “Seven-Day Follow-Up Following Hospitalization for Mental Illness,” which is a non-clinical study. The study topic was chosen to improve the rate of outpatient follow-up care after hospitalization for mental illness. The MC+MCO used their current HEDIS performance rates compared to the NCQA benchmarks and the Missouri Care Health Plan’s target as justification to initiate a performance improvement project. The

documentation presented a thorough discussion of the rationale for selecting this study topic. MC+ MCO initiated a performance improvement project in 2005 to implement case and care management activities to increase compliance with recommended outpatient treatment following hospitalization for mental health treatment for MC+MCO members. The information provided supporting the selection of this topic included a literature review and a sound argument for implementing this project. The interventions planned were open to all members who required hospitalization for a mental health related issue, who were over 3 years of age. No members were excluded based on having special healthcare needs.

The study question presented was “Does the implementation of case management and care management activities increase the percentage of members who receive an aftercare appointment within seven (7) days of discharge from a mental health hospitalization stay?” The study question was well constructed and did not limit future expansion of the PIP if additional interventions become necessary.

The study used well-operationalized indicators based on the requirements of the HEDIS measures. The indicators were clearly tied to the issues being addressed in this study. The methods prescribed to track and enumerate these measures were included in the narrative provided. The information provided in the narrative supported the assertion that increased aftercare would lead to stronger wellness outcomes for members with mental health issues. Data sources clearly identified all members who were to be included in the study. Exclusions included children under age three (3), members discharged to an inpatient treatment facility, and children in foster care, who do not receive outpatient mental health services through the MC+MCO. All MC+ Members, within the definitions of the targeted groups, were included. The data collection approach was well planned to capture all required information to identify and provide required services to the members who were part of the study population.

The narrative clearly described how data would be collected and analyzed. The study described the process the MC+MCO will utilize to extract data monthly. They will also use HEDIS data obtained yearly through a certified vendor. The narrative included enough specificity to ensure confidence that this process was thorough and complete. A prospective data analysis plan was presented. It included a plan for ensuring that attention to all issues were addressed, and also explained the service methodology to be employed. Statistical calculations to produce the 95%

confidence level calculated in the HEDIS methodology will be used to monitor the ongoing process. All data sources were clearly defined and the prospective data analysis plan was followed.

There were specific interventions identified in the narrative. How these interventions were related to the topic and study question was evident in the section related to provider education. The primary interventions described focused on contact with discharge planners, and facility education if aftercare appointments are not made. Case management activities with members regarding assistance with location of providers and follow-up to assure appointment compliance occurred. There was also a component on provider and member education to assist with ensuring that appropriate services were in place.

Data analysis was not complete at the time of the review. Confidence intervals and planning for identification of “real” improvement is part of the PIP documentation provided. The baseline year for this study was 2006. Additional information provided following the on-site review indicates that preliminary monthly data shows a significant increase from the 2006 rates.

This PIP was well-constructed. As it matures and all data becomes available it has a high potential for positive performance improvement. The analysis was planned and the documentation provided confidence that this project will be completed as described. The format and presentation led to ease in evaluating the project. Information was clear, organized, and understandable, all adding to the confidence in the potential outcomes.

## Conclusions

### QUALITY OF CARE

The issue of quality was a primary focus of the two PIPs undertaken by this MC+MCO. The quality of healthcare, and the overarching issue of the quality of life of health plan members, were both addressed in these PIPs. Enacting measures to improve access to primary preventive care, and assisting members in obtaining mental health services in an outpatient setting, enhances the quality of services received by these members. In both projects the MC+MCO stated their planned intention to incorporate these interventions into normal daily operations if the data indicates positive outcomes. By undertaking performance improvement projects that

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will develop into enhanced service provisions for members indicates a commitment to quality service delivery.

### ACCESS TO CARE

The study topics presented in these PIPS addressed issues that will create improved services and enhanced access to care for the MC+MCO members. Although each PIP approached their respective problems differently, each created a potential for improved access to appropriate services, in the least restrictive environment.

### TIMELINESS OF CARE

The major focus of these performance improvement projects was ensuring that members had timely access to care. By implementing strategies to ensure that members improve their use of outpatient treatment services within the seven-day timeframes of follow up after hospitalization for mental health treatment, the MC+MCO positively impacts timely access to care. The project indicates that the MC+MCO has a commitment to assisting members in engaging in timely treatment. The project focusing on increasing the use of appropriate asthma medications also provides members with opportunities to obtain the most appropriate service in the most appropriate setting. By working with providers to encourage patients to make timely appointments it enables better health care outcomes.

### RECOMMENDATIONS

1. Continue to utilize the protocols to evaluate performance improvement studies. The quality of the studies submitted has improved significantly. Although the second study is not entirely mature, it is evident that there was a great deal of thought and consideration put into planning for the potential outcomes. This process will also ensure that as the studies are completed, effective data collection and analysis will occur.
  
2. Consider all interventions that may affect the projected outcomes. Ensure that there is adequate documentation to explain the impact of the interventions on the findings and outcomes.



## 8.2 Validation Of Performance Measures

### METHODS

Objectives, technical methods, and procedures are described under separate cover. This section describes the documents, data, and persons interviewed for the Validation of Performance Measures for Missouri Care. Missouri Care submitted the requested documents on January 3, 2007. The EQRO reviewed documentation between January 3, 2007 and May 1, 2007. On-site review time was used to conduct follow-up questions and provide feedback and recommendations regarding the performance measure rate calculation.

### Document Review

The following are the documents reviewed by the EQRO:

- The Baseline Assessment Tool (BAT) submitted by Missouri Care
- Information Systems Capabilities Assessment (ISCA) submitted by Missouri Care
- MEDSTAT's NCQA HEDIS Compliance Audit Report for 2006
- Missouri Care's HEDIS Data Entry Training Manual
- Missouri Care's Policies pertaining to HEDIS rate calculation and reporting

The following are the data files submitted for review by the EQRO:

- FUH\_DenomAndNumer\_Reported\_T.txt
- FUH\_DenomAndNumer\_Revised\_T.txt
- FUH\_EnrollmentData\_Reported\_T.txt
- FUH\_EnrollmentData\_Revised\_T.txt
- PPC\_DenomAndNumer\_T.txt
- PPC\_EnrollmentDate\_T.txt
- PPC\_Hybrid\_T.txt
- W34\_DenomAndNumer\_T.txt
- W34\_EnrollmentData\_T.txt
- W34\_Hybrid\_T.txt

The Information Systems Capabilities Assessment (ISCA) review was conducted by the EQRO according to Appendix Z of the Validating Performance Measures protocol. The EQRO Project Director and Research Analyst reviewed all ISCA information provided by the plan. Follow-up reviews were conducted with Missouri Care staff during on site reviews. The review of MO Care focused on MO Care's ability to accurately report Medicaid data as required by State and Federal regulation. To fulfill it's obligations as a Medicaid contractor, MO Care must demonstrate that it has the automated systems, management practices, data control procedures

and rate calculation procedures required in place to assure that the data is adequately captured, stored, translated, analyzed, and reported.

The EQRO found that Missouri Care's Information Systems (IS): 1) contained complete and accurate encounter data, as specifically detailed in MO Care's Validation of Encounter Data section (Section 8.3) of this report; 2) correctly calculated the performance measures reviewed, as specifically detailed below in this Validation of Performance Measure section of the report; 3) contributed to MO Care's ability to conduct quality assessment and improvement initiatives, as specifically detailed in MO Care's Compliance with Managed Care Regulations section of this report (Section 8.4); and 4) allowed MO Care to oversee and manage the delivery of health care to its enrollees, as specifically detailed below in the Conclusions subsection of this section (Section 8.2) of the report.

## Interviews

The EQRO conducted on-site interviews with Katie Dunne, Tammy Weise, Brent Netemeyer and; Alan Boyett, HEDIS Administrator (of Austin Provider Solutions), at Missouri Care in Columbia on Tuesday, July 24, 2007. This group was responsible for the process of calculating the HEDIS 2006 performance measures. The objective of the on-site visit was to verify the methods and processes behind the calculation of the three HEDIS performance measures. This included both manual and automatic processes of information collection, storing, analyzing and reporting.

## FINDINGS

Missouri Care calculated the Follow-Up After Hospitalization for Mental Illness and Prenatal and Postpartum Care measures using the Hybrid Method. The administrative method was used to calculate the Well-Child in the Third, Fourth, Fifth and Sixth Years of Life measure.

MCO to MCO comparisons of the rates of Follow -Up After Hospitalization for Mental Illness, Prenatal and Postpartum Care, and Well-Child in the Third, Fourth, Fifth and Sixth Years of Life measures were conducted using two-tailed z-tests. For comparisons that were statistically significant at the 95% confidence interval (CI), the z-score (z), the upper and lower confidence intervals (CI), and the significance levels ( $p < .05$ ) are reported.

The HEDIS 2006 rate for Follow-Up After Hospitalization measure is reported as two rates, one for 7-day follow-up and one for 30-day follow-up. The Follow-Up After Hospitalization rate reported to the SMA and the State Public Health Agency (SPHA) by Missouri Care was 17.65% (7-day rate) and 47.79% (30-day rate). The 7-day rate reported was significantly lower than the statewide rate for all MC+ MCOs (31.16%;  $z = -.18$ ; 95% CI: 16.56%, 37.57%;  $p < .05$ ). The 30-day rate reported was consistent with the statewide rate for all MC+ MCOs (52.95%;  $z = -.43$ ; 95% CI: 39.53%, 59.95%;  $p < .05$ ).

The HEDIS 2006 rate for Missouri Care for the Well-Child Visits measure was 67.37%, which was consistent with the statewide rate for all MC+ MCOs (58.23%;  $z = -.50$ , statewide 95% CI: 52.76%, 64.88%;  $p < .05$ ).

The 2006 HEDIS rate for the Prenatal and Postpartum Care measure is reported as two rates, one for Timeliness of Prenatal Care and one for Postpartum Care. The reported rate for Missouri Care for the Prenatal Care rate was 89.05%; significantly higher than the statewide rate for MC+ MCOs (53.30%,  $z = -.57$ ; 95% CI: 36.80%, 67.63%; n.s.). The reported rate for Postpartum Care was 66.91%; significantly higher than the statewide rate for MC+ MCOs (44.54%,  $z = -.98$ ; 95% CI: 28.37%, 59.20%;  $p < .05$ ).

The following sections summarize the findings of the process for validating each of the performance measures in accordance with the Validating Performance Measures Protocol. The findings from all review activities are presented according to the EQRO validation activity, with the findings for each measure discussed within the activities as appropriate. Please refer to the tables in the main report for activities, ratings, and comments related to the [CMS Protocol Validating Performance Measures Attachments](#).

## Data Integration and Control

The information systems (IS) management policies and procedures for rate calculation were evaluated consistent with the Validating Performance Measures Protocol. For all three measures, Missouri Care was found to meet all criteria for producing complete and accurate data (see CMS Protocol Validating Performance Measures Attachment V: Data Integration and Control Findings). There were no biases or errors found in the manner in which Missouri Care transferred data into the repository used for calculating the HEDIS 2006 measures.

## Documentation of Data and Processes

Missouri Care and its affiliate, Schaller Anderson, contracted with Austin Provider Solutions (APS) for the calculation of the HEDIS 2006 performance measures. The internally-developed application had received NCQA certification and been reviewed by NCQA for source code validation and efficiency of data integration. The EQRO was provided with a process overview of the QMACS claims management system, a registered trademark owned by Quality Care Solutions, Inc. (QCSI), and a validation overview of the HEDIS Data repository of APS. The EQRO was also provided with an overview of the data flow and integration mechanisms for external databases for these measures. Data and processes used for the calculation of measures were adequate (see CMS Protocol Validating Performance Measures Attachment VII: Data and Processes Used to Calculate and Report Performance Measures). Missouri Care met all criteria that applied for all three measures.

## Processes Used to Produce Denominators

Missouri Care met all criteria for the processes employed to produce the denominators of all three performance measures (see CMS Protocol Validating Performance Measures Attachment X: Denominator Validation Findings). This involved the selection of members eligible for the services being measured. Missouri Care employed a 5% oversample for the Well-Child Visits and Prenatal and Postpartum Care measures. For the Well-Child measure, there was one record excluded due to contraindications identified through administrative data, and there was one record chosen from the auxiliary list for replacement, making for a total sample of 399. For the Prenatal and Postpartum Care measure, there were two records excluded due to contraindications identified through administrative data, and there were two records chosen from the auxiliary list for replacement, making for a total sample of 432.

For the HEDIS 2006 Follow-Up After Hospitalization measure, the DST showed a total of 136 eligible members for the denominator. The file of all administrative records supplied by the MCO contained 136 eligible members. There was no duplication of members and the dates of birth and dates of enrollment were within the valid range.

For the HEDIS 2006 Well-Child Visits measure, there were a total of 4,254 eligible members listed by the MCO and validated by the EQRO. The DST showed a denominator of 380, with a

final sample size of 399 after a 5% oversample. There were no exclusions allowed for the measure, and no exclusions or replacements reported. There were no duplicate member names, identification numbers or dates of birth. The dates of birth were within the valid range and the dates of enrollment and codes for well care visits were provided.

For the HEDIS 2006 Prenatal and Postpartum Care measure, there were a total of 1,342 eligible members validated by the EQRO. The DST showed a denominator of 411, with a final sample size of 432 after a 5% oversample. There were no duplicate members and the dates of birth were in the valid range. The dates of enrollment were valid.

### **Processes Used to Produce Numerators**

All three measures included the appropriate data ranges for the qualifying events (e.g., immunizations, well-care visits, and asthma medications) as specified by the HEDIS 2006 criteria (see CMS Protocol Validating Performance Measures Attachment XIII: Numerator Validation Findings). Medical record reviews were conducted for the Well-Child Visit and Prenatal and Postpartum Care measures.

For the HEDIS 2006 Follow-Up After Hospitalization measure, the MCO reported 24 administrative hits from the eligible population for the 7-day follow-up rate; the EQRO validated 19 administrative hits, which represents an over reported bias of 3.68%. The MCO reported 65 administrative hits from the eligible population for the 30-day follow-up rate; the EQRO validated 60 administrative hits, which represents an over reported bias of 3.68%.

For the Well-Child Visit, Missouri Care 243 administrative hits from the eligible population; the EQRO validated 243 administrative hits. For the medical record review validation, the EQRO requested 11 records, as this was the number of medical records reported to contain hits. A total of 11 records were received for review; 11 of those were validated by the EQRO. Therefore, the percentage of medical records validated by the EQRO was 100.00%. The rate calculated by the EQRO based on validated administrative and hybrid hits was 66.84%, resulting in an overestimate of 0.53%.

For the HEDIS 2006 Prenatal and Postpartum measure, the measure is reported in two rates: 7-day follow-up and 30-day follow-up. For the 7-day follow-up rate, all 195 administrative hits

reported were validated. For the 30-day follow-up rate, all 201 administrative hits were validated. The EQRO requested and received 30 medical records reported to have contributed to the hybrid hits. Of these 30 medical records, 30 were found to be a “hit”, for 7-day follow-up and 27 were found to be a “hit”, for 30-day follow-up. The rate calculated by the EQRO based on validated administrative and hybrid hits for the 7-day follow-up was 89.05%. The rate reported by the MCO was 89.05%, which resulted in no observed bias. The rate calculated by the EQRO based on validated administrative and hybrid hits for the 30-day follow-up was 65.11%, which resulted in an overestimate of 1.80% by the MCO.

### **Sampling Procedures for Hybrid Methods**

The Hybrid Method was used for the Childhood Immunization Status and Well-Child Visits measures. [CMS Protocol Validating Performance Measures Attachment XII](#); Impact of Medical Record Review Findings and [CMS Protocol Validating Performance Measures Attachment XV](#): Sampling Validation Findings were completed for each of these measures.

### **Submission of Measures to the State**

Missouri Care submitted the DST for each of the three measures validated to the SPHA (the Missouri Department of Health and Senior Services; DHSS) in accordance with the Code of State Regulations (19 CSR §10-5.010 Monitoring Health Maintenance Organizations) and the SMA Quality Improvement Strategy.

### **Determination of Validation Findings and Calculation of Bias**

Table 7I shows the estimated bias and the direction of bias found by the EQRO. Both measures calculated by the Hybrid Method were within the 95% lower confidence limits reported by the MCO. There was no bias observed in calculation of the 7-day Follow-Up After Hospitalization measure.

**Table 7I - Estimate of Bias in Reporting of HEDIS 2005 Measures**

Measure	Estimate of Bias	Direction of Estimate
Follow-Up After Hospitalization for Mental Illness (7day)	3.68%	Overestimate
Follow-Up After Hospitalization for Mental Illness (7day)	3.68%	Overestimate
Well-Child Visits in Third, Fourth, Fifth, and Sixth Years of Life	0.53%	Overestimate
Prenatal and Postpartum Care (Prenatal)	None	
Prenatal and Postpartum Care (Postpartum)	1.80%	Overestimate

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## Final Audit Rating

The Final Audit Rating for each of the performance measures was based on the findings from all data sources that were summarized in the Final Performance Measure Validation Worksheet for each measure. Table 72 (see below) summarizes the Final Audit Ratings based on the [CMS Protocol Validating Performance Measures Attachments](#) and the EQRO validation of numerators and denominators.

**Table 72 - Final Audit Rating for HEDIS 2005 Performance Measures**

Measure	Final Audit Rating
Follow-Up After Hospitalization for Mental Illness (7day)	Substantially Compliant
Follow-Up After Hospitalization for Mental Illness (7day)	Substantially Compliant
Well-Child Visits in Third, Fourth, Fifth, and Sixth Years of Life	Substantially Compliant
Prenatal and Postpartum Care (Prenatal)	Fully Compliant
Prenatal and Postpartum Care (Postpartum)	Substantially Compliant

Note: Fully Compliant = Measure was fully compliant with State specifications; Substantially Compliant = Measure was substantially compliant with State specifications and had only minor deviations that did not significantly bias the reported rate; A significant bias in the rate was defined as a number calculated by the EQRO that fell outside the 95% confidence interval of the rate reported by Missouri Care. Not Valid = Measure deviated from State specifications such that the reported rate was significantly biased. This designation is also assigned to measures for which no rate was reported; Not Applicable = No MC+ Members qualified for the measure.

## CONCLUSIONS

Five rates were validated for the MCO. One of these rates was significantly lower , two were consistent with; and two were significantly higher than the average for all MC+ MCOs.

## QUALITY OF CARE

Missouri Care's calculation of the HEDIS 2006 Follow-Up After Hospitalization for Mental Illness measure was substantially complaint with specifications. This measure is categorized as an Effectiveness of Care measure and is designed to measure the effectiveness/quality of care delivered. The MCO's 7-day follow-up rate for this measure was significantly lower than the average for all MC+ MCOs. The MCO's 30-day follow-up rate for this measure was consistent with the average for all MC+ MCOs. Thereby, Missouri Care's members are receiving the quality of care for this measure consistent with and/or lower than the care delivered to all other MC+ members.

The EQRO was able to validate this rate within the reported 95% confidence intervals and thereby has substantial confidence in the calculated rate.

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## ACCESS TO CARE

The MCO's calculation of the HEDIS 2006 Prenatal and Postpartum Care measure was fully compliant. This measure is categorized as an Access/Availability of Care measure and is designed to measure access to the care defined. The MCO's reported rate for both of this measures rates (Prenatal Care and Postpartum Visits) were significantly higher than the average for all MC+ MCOs. Thereby, Missouri Care's members are receiving the access to care for this measure at a higher level than the care delivered to the average MC+ member. Additionally, both of these rates were reported as higher than the National Medicaid Rate, thereby Missouri Care is delivering a higher level of care than that received by the average Medicaid member across the nation.

The EQRO was able to fully validate the Prenatal Care rate reported by the MCO for this measure and therefore is extremely confident in the MCO's reported rate. The EQRO was able to validate the Postpartum Visits rate within the reported 95% confidence intervals and thereby has confidence in the calculated rate.

## TIMELINESS OF CARE

The MCO's calculation of the HEDIS 2006 Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life measure was substantially compliant. This measure is categorized as an Use of Services measure and is designed to measure the timeliness of care received. The MCO's reported rate for this measure was consistent with the average for all MC+ MCOs. Thereby, Missouri Care's members are receiving the timeliness of care for this measure consistent with the care delivered to all other MC+ members. Additionally, this rate was reported at higher than both the National Medicaid and National Commercial Rates, thereby Missouri Care is delivering a higher level of care than that received by the average Commercial or Medicaid member across the nation.

The EQRO was able to validate this rate within the reported 95% confidence intervals and thereby has confidence in the calculated rate.

## RECOMMENDATIONS

- I. Ensure that all data submitted to the EQRO for review is in the proper format and that files contain all the necessary components in order to be validated.

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2. The MCO's Follow-Up After Hospitalization Rate (7 day follow-up) was significantly lower than the average rate for all MC+ MCOs. The EQRO recommends the MCO concentrate efforts to improve this rate.
3. Continue to conduct and document statistical comparisons on rates from year to year.
4. Continue to participate in training of MCO staff involved in the oversight of coordination of performance measure calculation.

## 8.3 Validation of Encounter Data

### FINDINGS

The findings for the encounter data validation are organized according to the encounter data evaluation questions presented in the Technical Methods section for the encounter data validation in the aggregate report. Please refer to the main report for detailed objectives, technical methods and procedures for encounter data validation.

#### **What is the Baseline Level of Completeness, Accuracy, and Reasonableness of the Critical Fields?**

For the Medical claim type, there were 84,827 encounter claims paid by the SMA for the period July 1, 2006 through September 30, 2006.

The Outpatient Claim Type field was 100.00% complete, accurate and valid.

The Outpatient Recipient ID field was 100.00% complete, accurate and valid.

The Outpatient First Date of Service field was 100.00% complete, accurate and valid.

The Outpatient Last Date of Service field was 100.00% complete, accurate and valid.

The Outpatient Units of Service field was 100.00% complete, accurate and valid.

The Outpatient Procedure Code field was 100.00% complete, accurate and valid.

The Outpatient Place of Service field was 100.00% complete, accurate and valid.

The first Diagnosis Code field was 100.00% complete, accurate and valid.

Although the second through fifth Diagnosis Code fields are optional according to the Health Plan Record Layout Manual, the second, third, fourth and fifth Diagnosis Code fields were well below the SMA threshold of 100.00% for completeness, accuracy and validity. The Diagnosis Code fields were 46.30%, 21.86%, 10.37%, and 0.00% complete, accurate and valid, respectively. The remaining fields were blank (incomplete, inaccurate and invalid).

For the Dental claim type, there were 12,201 encounter claims paid by the SMA for the period July 1, 2006 through September 30, 2006. All fields examined excluding the first and fifth Diagnosis fields were 100.00% complete, accurate and valid.

The first and fifth Diagnosis fields were 0.00% complete, accurate and valid. All fields were blank.

For the Home Health claim type, there were no encounter claims paid by the SMA for the period July 1, 2006 through September 30, 2006.

For the Inpatient claim type, there were 12,150 encounter claims paid by the SMA for the period July 1, 2006 through September 30, 2006.

1. The Inpatient Claim Type field was 100.00% complete, accurate and valid.
2. The Recipient ID field was 100.00% complete, accurate and valid.
3. The Admission Type field was 100.00% complete, accurate and valid.
4. The Admission Date field was 100.00% complete and accurate, and valid.
5. The Discharge Date field was 100.00% complete, accurate and valid.
6. The Bill Type field was 100.00% complete, accurate and valid.
7. The Patient Status field was 100.00% complete, accurate and valid.
8. The first Diagnosis Code field was 100.0% complete, accurate and valid.
9. The second, third, fourth and fifth Diagnosis Code fields fell well below the 100% threshold for completeness, accuracy, and validity established by the SMA (9.74%, 79.11%, 61.79%, 45.87%, and 25.99% respectively). The remaining fields were blank (incomplete, inaccurate, and invalid).
10. The First Date of Service field was 100.00% complete, accurate and valid.
11. The Last Date of Service field was 100.00% complete, accurate and valid.
12. The Revenue Code field was 99.98% complete, accurate, and valid. Two fields were blank (incomplete, inaccurate, and invalid).
13. The Units of Service field was 100.00% complete, accurate and valid.

For the Outpatient Hospital claim type, there were 59,951 encounter claims paid by the SMA for the period July 1, 2006 through September 30, 2006. Missouri Care had 100.00% complete, accurate and valid data for all fields examined, except the Procedure Code, second, third, fourth and fifth Diagnosis Codes. The Procedure Code field was 97.34% complete, accurate and valid. The remaining fields (n=1597) were blank. The second Diagnosis Code field was 53.97% complete and accurate, and 53.96% valid. The remaining fields were blank (n = 27595) or contained invalid codes (n = 7). The third Diagnosis Code field was 25.48% complete, accurate and valid. The remaining fields were blank (incomplete, inaccurate, and invalid). The fourth Diagnosis Code field was 12.09% complete, accurate, and 12.07% valid. The remaining Diagnosis Code fields were blank (n = 52703) or contained invalid codes (n = 10). The fifth Diagnosis Code field was 5.31% complete, accurate and valid. All remaining Diagnosis Code fields were blank (incomplete, inaccurate, and invalid).

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For the Pharmacy claim type, there were 44,239 claims paid by the SMA for the period July 1, 2006 through September 30, 2006. Missouri Care had 100.00% complete, accurate and valid data for all fields examined.

### **What Types of Encounter Claim Data are Missing and Why?**

Based on the above analysis of the accuracy, completeness, and validity of the data in the SMA encounter claims extract file for Missouri Care, an error analysis of the invalid entries was conducted for fields which were lower than the 100.00% threshold specified by the SMA. All critical fields for the Inpatient, Outpatient Medical, Dental and Pharmacy claim types were 100.00% complete, accurate, and valid (see previous findings). The Outpatient Hospital Claim type had invalid data in the Procedure Code fields.

### **What is the Level of Volume and Consistency of Service?**

When comparing the rate of encounter claim types per 1,000 members, the rates for Medical, Inpatient, and Outpatient Hospital claim types were significantly higher than the average for MC+ MCOs. The rate for Pharmacy and Dental claims were consistent with the average for MC+ MCOs. This suggests high rates of encounter data submission and access to preventive and acute care.

### **To what Extent do the Claims in the State Encounter Claims Database Reflect the Information Documented in the Medical Record? What is the Fault/Match Rate between State encounter Claims and Medical Records?**

To examine the degree of match between the SMA encounter claims database and the medical record, 100 encounters from each MC+ MCO were randomly selected from all claim types for the period July 1, 2006 through September 30, 2006 for medical record review.

Of the 213,368 encounter claim types in the SMA extract file for July 1, 2006 through September 30, 2006, 100 encounters were randomly selected. Providers were requested to submit medical records for review. There were 100 medical records (100.0%) submitted for review. Encounters for which no documentation was submitted were unable to be validated. The match rate for procedures was 64.0%, with a fault rate of 36.0%. The match rate for diagnoses was 79.76%, with a fault rate of 20.24%. The match rate for name of drug dispensed

was 56.25%, with a fault rate of 43.75%. The match rate for quantity of drug dispensed was 62.5%, with a fault rate of 37.5%.

### **What Types of Errors Were Noted?**

An error analysis of the errors found in the medical record review for procedure, diagnosis, name of drug dispensed, and quantity of drug dispensed was conducted.

For the procedure codes in the medical record, the reasons for procedure codes in the SMA extract file not being supported by documentation in the medical record were missing information (n = 18), incorrect codes (n = 2). For the diagnosis codes in the medical record, the reasons for diagnosis codes in the SMA extract file not being supported by documentation in the medical record was missing information (n = 17). Examples of missing information include no code; codes listed that were not supported, or codes that did not match the procedure description.

For the name of drug dispensed in the medical record, the reasons for drug names or NDC in the SMA extract file not being supported by documentation in the medical record were missing information (n = 7). No drug name or NDC was found in the records received by the EQRO.

For the quantity of drug dispensed in the medical record, the reasons for quantity of drug in the SMA extract file not being supported by documentation in the medical record were missing information (n = 6). No quantity was found in the records received for review by the EQRO.

### **To what extent do the MC+ MCO paid/unpaid encounter claims match the SMA paid database?**

Since Missouri Care included internal control numbers that matched those of the SMA, the EQRO conducted the planned analyses comparing MC+ MCO encounter data to the SMA encounter claim extract file. The SMA defined “unpaid claims” as those claims that the MCO denied for payment, unpaid claims do not include claims paid via a capitation plan.

For the Pharmacy Claim type, all encounter data submitted to the EQRO (n = 44,239) was of “paid” status. There were 15 unmatched claims that were in the MOCare encounter file and

absent from the SMA data. Thus, 99.99% of the EQRO submitted encounters matched with the SMA encounter records.

For all Outpatient Claim Types (Medical, Dental, and Hospital), MOCare submitted 156,979 “paid” encounters and 143 “denied” claims. All paid encounter claims matched with the SMA encounter claim extract file. The 143 denied claims were not present in the SMA database (as expected); there was a “hit” rate of 99.91% between MOCare encounter claims and the SMA encounter data.

For the Inpatient Claim Type, MOCare submitted 12,150 encounter claims of “paid” status and 18 “denied” claims. All paid encounter claims matched with the SMA encounter claim extract file. The denied claims were not present in the SMA database.

### **Why are there unmatched claims between the MC+ MCO and SMA data files?**

The unmatched encounters are due to missing ICN numbers which are required to match the encounter to that of the SMA. Therefore, in all claim types, the encounter claims were legitimately missing from the SMA extract data.

### **What are the Data Quality Issues Associated with the Processing of Encounter Data?**

While the MC+ MCO did submit the data in the requested format (including most ICN numbers), there are a number of ways to improve the data quality by improving the database system. As the Internal Control Number is only assigned by the State database when a claim is paid, it is difficult to match the MC+ MCO data of “unpaid” and “denied” claims to the SMA data. As the Internal Control Number is unique only to the encounter, the ICN may be represented in multiple lines of data. To match the MC+ MCO data to the SMA data to specific fields, this requires a unique line number. Therefore each service provided within an encounter would have a separate line of data with a unique line identifier.

## STRENGTHS

1. Encounter data was submitted to the EQRO in the requested format and even included internal control numbers which enabled BHC to conduct the planned comparisons between the MC+ MCO and the SMA extract files.
2. The critical field validation of all six claim types resulted in few fields under the SMA established threshold of 100.00% accuracy, completeness, and validity.
3. The critical fields examined for the Dental, Outpatient Medical, and Pharmacy claim types were 100.00% complete, accurate and valid.
4. The rates for Inpatient, Outpatient Medical, and Dental claim types were significantly higher than the average for MC+ MCOs, suggesting high rates of encounter data submission and at least moderate access to preventive and acute care.

## AREAS FOR IMPROVEMENT

1. The Inpatient Revenue Code fields contained invalid (blank) entries.
2. The Outpatient Procedure Code fields contained invalid entries.
3. The match rate for drug name between the SMA encounter claims extract file and the medical records for Missouri Care were significantly lower than the average for all MC+ MCOs.
4. The MCO reported no Home Health encounter claims during the review period.

## RECOMMENDATIONS

1. Examine and revise as needed internal system edits for invalid procedure codes in the NSF/CMS 1500 file layout for the Outpatient Procedure Code and run validity checks after the programming of new edits.
2. Ensure that Revenue Code fields are complete and valid for the Inpatient (UB-92) claim types, and institute error checks to identify invalid data.
3. Include all State issued ICN numbers for all encounters to allow more accurate matching of encounters between the MC+ MCO and SMA extract files.

## 8.4 MCO Compliance with Managed Care Regulations

### METHODS

Prior to the site visit, documentation was received and reviewed regarding the MCO's compliance with the State contract. The External Quality Review Organization (EQRO) reviewed contract documents with the staff of the Division of Medical Services (DMS). On-site review time was used to conduct interviews with those who oversee the daily activities of the MCO to ensure that documentation is developed and practices occur within the scope of the contract and in a manner that meets or exceeds federal regulations.

A detailed protocol (BHC MCO Compliance Review Scoring Form) was utilized to ensure that all the elements of the federal regulations were addressed in the review process. Additionally, an interview tool was constructed to validate practices that occur at the MCO and to follow-up on questions raised from the document review and from the 2004 and 2005 External Quality Review. Document reviews occurred on-site to validate that practices and procedures were in place to guide organizational performance.

### Document Review

The Division of Medical Services supplied:

- State of Missouri Contract Compliance Tool (including DMS responses and comments)

The following documents were requested for on-site review:

- Member Handbook
- Provider Handbook
- Prior Authorization Time Frames/Policy/Processes
- Policy Tracking Log
- Staff Training Log
- Credentialing Policies and Audit Reports
- Opt Out Listings
- Denial Logs
- Grievance Logs (Member and Providers)
- Grievances and Appeals related to members were reviewed, as were Complaints, Grievances, and Appeal files for providers. These files were obtained from a random selection process of actions filed in the first quarter of 2005

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- 2005 Annual Quality Improvement Program Evaluation

Additional documentation made available by Missouri Care Health Plan included:

- Marketing Plan and Educational Material Development Policy
- 2006 Marketing Materials
- Missouri Care Organizational Chart
- Missouri Care Provider Directory
- Behavioral Health Discharge Follow-Up, Autism, and Emergency Room Surveys
- Missouri Care Behavioral health Update, January 2006 (Member Newsletter)
- Missouri Care Informational Handouts

## **Interviews**

Interviews were conducted with the following group:

### **Plan Administration**

Susan Christy, Executive Director

Dr. Andrew Matera, Chief Medical Officer

Melody Dowling, UM Manager

Tammy Weise, Manager, Quality Management

Brenda Moore, Manager, Medical Management

Debby Langley, Manager, Member Solutions

Brent Netemeyer, Director, Operations

Carole Mosley, Compliance Analyst

Katie Dunne, Senior Quality Coordinator

### **Mental Health**

Dr. Andrew Matera, Chief Medical Officer

Melody Dowling, UM Manager

Tammy Weise, Manager, Quality Management

Debby Langley, Manager, Member Solutions

## **FINDINGS**

### **Enrollee Rights and Protections**

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Missouri Care had an assigned compliance officer who maintained a record of all internal policies and presented reminders to appropriate staff when annual reviews were required. Compliance reviews are conducted every other month. Records included all initial approval dates to ensure that timely monthly reminders were produced. Revisions were made as necessary. Internal approval included the Quality Management Oversight Committee, Managers, the Chief Medical Director, and the Executive Director prior to submission to the SMA.

The MCO continued to utilize the Child and Adolescent Health Measurement Initiative (CAHMI) survey instrument for member needs assessment. Missouri Care utilized the monthly special needs listing produced by the SMA and sent the survey to all of their members appearing on this listing. If they received no response in seven days, and again in fourteen days, they made additional attempts using telephone contacts. If the MCO was unable to contact the member after 30 days, the file was closed. Missouri Care reported they send out 75-100 CAHMIs each month and have a 30-35% response rate. The MCO found that by using the CAHMI, it assisted in correctly identifying members who needed physical or mental health case management services.

The MCO continues to utilize the ADHD Toolkit that was developed for providers. These guidelines have been distributed to all providers in the Missouri Care network. Some revisions were implemented after surveying providers to enhance available information. The MCO continues to receive positive feedback from providers about how this Toolkit assists in identifying this diagnosis and discussing it with members.

The MCO also identified dissatisfaction expressed by members with provider communication. This was originally identified in the 2005 CAHPS Survey. Missouri Care used both their newsletters to members and providers to discuss the issue of positive communication techniques. The MCO has identified a reduction in the complaints from members.

Missouri Care continues to participate in community-based programs throughout their MC+ Medicaid Managed Care region. They were involved in school-based health clinics whenever possible. The MCO participated in a back-to-school fair where they not only contacted member families directly, but were able to network with regional primary care physicians (PCPs). Additionally, outreach calls were made to all eligible children. One local Federally

Qualified Health Center (FQHC) conducts evening appointments to do Pap tests and adolescent EPSDT examinations. As a trial intervention, Missouri Care scheduled appointments for the FQHC utilizing demographic information obtained from their system. These efforts resulted in additional examinations. Through efforts with the Columbia Public Schools, the MCO targeted a campaign to increase EPSDT examinations in the Boone County section of the region. EPSDT examinations for high school students were planned at the new Family Health Clinic satellite location near the Frederick Douglas High School building. A quarterly newsletter for school nurses was developed and continues to be distributed by the MCO.

The rating for Enrollee Rights and Protections (100%) reflects that the MCO substantially complied with the submission and approval of all policy and procedures to the SMA. All practice observed at the on-site review indicated that the MCO appeared to be fully compliant with MC+ Medicaid Managed Care Contract requirements and federal regulations in this area.

**Table 73 – Subpart C: Enrollee Rights and Protections Yearly Comparison (Missouri Care)**

<b>Federal Regulation</b>	<b>Missouri Care</b>		
	<b>2004</b>	<b>2005</b>	<b>2006</b>
438.100(a) Enrollee Rights: General Rule	1	2	2
438.10(b) Enrollee Rights: Information Requirements	2	2	2
438.10(c)(3) Alternative Language: Prevalent Language	2	2	2
438.10(c)(4,5) Language and Format: Interpreter Services	1	2	2
438.10(d)(1)(i) Information Requirements: Format/Easily Understood	2	2	2
438.10(d)(1)(ii)and (2) Information Requirements: Format Visually Impaired, and Limited Reading Proficiency	2	2	2
438.10(f) Information for All Enrollees: Free Choice, etc.	2	2	2
438.10 (g) Information to Enrollees: Specifics/Physician Incentive Plans	2	2	2
438.10(i) Special Rules: Liability for Payment/Cost Sharing	1	2	2
438.100(b)(2)(iii) Enrollee Rights: Provider-Enrollee Communications	2	2	2
438.100(b)(2)(iv,v) Rights to Refuse Services/Advance Directives	1	2	2
438.100(b)(3) Right to Services	1	1	2
438.100(d) Compliance with Other Federal/State Laws	1	2	2
Number Met	7	12	13
Number Partially Met	6	1	0
Number Not Met	0	0	0
Rate Met	53.8	92.3%	100%

Note: 0 = Not Met; 1= Partially Met; 2 = Met

Sources: Department of Health and Human Services Centers for Medicare & Medicaid Services (2003). Monitoring Medicaid Managed Care Organizations (MCOs) and Prepaid Inpatient Health Plans (PIHPs): A protocol for determining compliance with Medicaid Managed Care Proposed Regulations at 42 CFR Parts 400, 430, et al. Final Protocol Version 1.0.; BHC, Inc., 2004 External Quality Review Monitoring MCOs Protocols.

## **Behavioral Health**

In 2005, through efforts with the SMA, the University of Missouri, and other State agencies, Missouri Care made tele-psychiatry services available in six counties in the Central Missouri region. This service continues to be available and creates access in outpatient offices for use by specialist psychiatrists. Face-to-face sessions with the member's behavioral health provider are required. Pediatric and adolescent psychiatrists are available through this method in outlying counties, where these services would normally be unavailable. In some cases, the parent and case manager participated in sessions with the member and psychiatrist. This innovation creates a more comprehensive approach to treatment for a number of members.

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Missouri Care reports that provider availability has improved during 2006. There is a larger network using smaller in-home provider groups, as well as independent providers. The MCO believes that working directly within the Central MC+ Region communities, they have been able to identify and recruit mental health providers that are regionally based. These providers are often keenly aware of community and family issues that assist members obtaining the best service in the most convenient environment. The MCO found that issues such as drug overdoses are now treated appropriately. In the past, members were seen in an emergency room and released. Efforts to educate providers have created an atmosphere where the MCO is notified and follow-up services are put in place in an expedient manner.

Members who require inpatient treatment are served directly by case management staff. Case managers assist the member in obtaining an inpatient bed, and work to ensure that appropriate aftercare services are arranged. The MCO finds that overall inpatient days have been reduced and outpatient service utilization has increased.

During the on-site review the MCO demonstrated their new integrated information system. Case Managers will have access to all patient information, whether it comes from a physical or mental health source. The system is linked to the authorization and claims system. All demographics and PCP identification will be automatically added to the member's screens. This new system is connected to Case Tracker, the current behavioral health case management system, which will assist in identification of service need and delivery. The MCO reports that it is developing a clearer understanding of member needs, which leads to the most effective levels of care for members. Missouri Care believes these processes will reduce inappropriate inpatient admissions, and ensure that the most appropriate level and amount of care is received.

Case management for mental health was done by a master's level social worker and staff under the direction of the Chief Medical Officer for Behavioral Health.

## **Quality Assessment and Performance Improvement**

### **Access Standards**

New and additional specialties have been added to the Missouri Care network through an agreement with Kansas City Children's Mercy Hospital. The MCO is also working with St. Louis Children's Hospital to obtain an agreement. These additions have made orthopedic services

more accessible to members. Pediatric cardiology and neurology are available at the University of Missouri Hospital and Clinics. Dental care continues to be a problem and the MCO continues its recruitment efforts in this area. The MCO does contract with a staff model at Mid-MO Dental. This provider offers morning set-aside appointments to meet emergency dental needs.

The MCO began using a predictive model to identify candidates for case management. This model, Pathways, gives a profile which helps to identify the potential for case management. Through the information obtained from this system, the case manager can determine the reasons for accessing care in the emergency room. Other categories of care explored include the providers that have been utilized, how much pharmacy usage has occurred, and what durable medical equipment was authorized and purchased. On the daily patient census, a drill down can provide reasons for admission such as maternity, behavioral health verses physical health, as well as identifying the inpatient facility used and the length of stay. This program refreshes every three hours and is linked to Milliman Guidelines for utilization review purposes. A link also exists to review notes. This model gives a quick look at member activity for a one year timeframe. The MCO believes the model will be useful to both case management staff and providers. It will allow the Medical Director to discuss a case with the Primary Care Physician and will enable them to ask and resolve questions quickly.

Prenatal case management continues to be a focus of the care provided to MCO members. The MCO staff continues to use the global OB form, which includes risk factors and points to the need for case management. Referrals are sometimes made to the Department of Social Services Children's Division for in-home services from this information. The information also generates a notice regarding members when they are identified as pregnant. The system generates a packet of information, educational material for members, and notices for visits that can be used as incentives to maintain scheduled appointments.

The Missouri Care Nurse Line call center, located in Phoenix, Arizona, is staffed 24 hours per day, seven days per week. Both nurse and physician coverage is available. After hours access of local providers has improved. During 2006 four clinics were found to be out of compliance. Education and follow-up activities occurred. Recent checks indicate that these clinics are now

complying with after-hours requirements and are compliant. This follow-up information was obtained through a follow-up survey completed in April 2007.

The MCO integrated physical and mental health services including prior authorizations, the Nurse Line, Provider Relations and Member Solutions. Missouri Care was in the process of integrating the physical and mental health case management information into one database at the time of the on-site review.

Missouri Care began to use predictive modeling to assist in the identification of members in need of case management. The system was only used for physical health case management during 2005 and has been expanded in 2006. The process assisted the MCO in identifying members who needed case management, but who had not previously come to their attention. The MCO planned to incorporate non-compliance with medical recommendations into the logic of this program in the future. The language for care planning was being incorporated into all Missouri Care policy. The care plans were to be developed by the provider and member, with the assistance of the MCO case manager as needed. Provider education was completed in 2005.

Missouri Care reported that their dental subcontractor did continue to search for additional providers throughout the Central Missouri region. Dentists were added throughout 2005, but recruitment continued. The MCO added the University of Missouri – Kansas City Dental School and several mobile dental units to their network.

The rating for Access Standards (100%) indicates that the MCO has actively worked toward becoming fully compliant with all MC+ Medicaid Managed Care requirements and federal regulations. All practice in this area observed at the time of the on-site review indicated that Missouri Care worked toward ensuring that members have access to all the healthcare services that they may require.

**Table 74 – Subpart D: Quality Assessment and Performance Improvement: Access Standards Yearly Comparison (Missouri Care)**

Federal Regulation	Missouri Care		
	2004	2005	2006
438.206(b)(1)(i-v) Availability of Services: Provider Network	2	2	2
438.206 (b) (2) Access to Well Woman Care: Direct Access	2	2	2
438.206(b)(3) Second Opinions	2	2	2
438.206(b)(4) Out of Network Services: Adequate and Timely Coverage	2	2	2
438.206(b)(5) Out of Network Services: Cost Sharing	2	2	2
438.206(c)(1)(i-vi) Timely Access	2	2	2
438.206(c)(2) Provider Services: Cultural Competency	2	2	2
438.208(b) Care Coordination: Primary Care	2	2	2
438.208(c)(1) Care Coordination: Identification	2	2	2
438.208(c)(2) Care Coordination: Assessment	1	2	2
438.208(c)(3) Care Coordination: Treatment Plans	2	2	2
438.208(c)(4) Care Coordination: Direct Access to Specialists	2	2	2
438.210(b) Authorization of Services	1	2	2
438.210(c) Notice of Adverse Action	1	2	2
438.210(d) Timeframes for Decisions, Expedited Authorizations	1	1	2
438.210(e) Compensation of Utilization Management Activities	2	2	2
438.114 Emergency and Post-Stabilization Services	1	1	2
Number Met	12	15	17
Number Partially Met	5	2	0
Number Not Met	0	0	0
Rate Met	70.6%	88.2%	100%

Note: 0 = Not Met; 1= Partially Met; 2 = Met

Sources: Department of Health and Human Services Centers for Medicare & Medicaid Services (2003). Monitoring Medicaid Managed Care Organizations (MCOs) and Prepaid Inpatient Health Plans (PIHPs): A protocol for determining compliance with Medicaid Managed Care Proposed Regulations at 42 CFR Parts 400, 430, et al. Final Protocol Version 1.0.; BHC, Inc., 2004 External Quality Review Monitoring MCOs Protocols.

### **Structures and Operation Standards**

Credentialing policies and practices were reviewed on-site. All credentialing performed by Missouri Care meets NCQA standards and comply with federal and state regulations, and the SMA contract requirements. Re-credentialing is completed at three-year intervals, and delegated entities are monitored annually. State and federal sanctions are monitored monthly using the HHS OIG/OPM (Office of Inspector General/Office of Personnel Management) web site. Internal information regarding grievances and quality issues are also monitored. Compliance with policies related to advance directives is monitored in records of primary care providers prior to re-credentialing (for PCP, hospital, home health agency, personal care

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provider or hospice). Confidentiality, nondiscrimination and rights to review files and to appeal are all included.

Delegation agreements are developed in accordance with Missouri Care policy. The delegation of responsibility must include all delegated activities and the organization's accountability for those activities. Five entities were audited in 2006. Four passed. One, Crown Optical, was re-audited on three subsequent occasions, with an emphasis on policies and procedures. Full compliance was achieved in January 2007.

The rating for Structure and Operations (100%) reflects full compliance with the MC+ Medicaid Managed Care contract requirements and federal regulations. The MCO submitted all required policy for approval, and all practice observed at the time of the on-site review indicated compliance in this area. All credentialing policy and practice was in place. All disenrollment policy was complete and all subcontractual requirements were met.

**Table 75 – Subpart D: Quality Assessment and Performance Improvement: Structure and Operation Standards Yearly Comparison (Missouri Care)**

Federal Regulation	Missouri Care		
	2004	2005	2006
438.214(a,b) Provider Selection: Credentialing/Recredentialing	2	2	2
438.214(c) and 438.12 Provider Selection: Nondiscrimination	1	2	2
438.214(d) Provider Selection: Excluded Providers	2	2	2
438.214(e) Provider Selection: State Requirements	2	2	2
438.226 and 438.56(b)(1-3) Disenrollment: Requirements and limitations	2	2	2
438.56(c) Disenrollment Requested by the Enrollee	2	2	2
438.56(d) Disenrollment: Procedures	2	2	2
438.56(e) Disenrollment: Timeframes	2	2	2
438.228 Grievance System	2	2	2
438.230(a,b) Subcontractual Relationships and Delegation	2	2	2
Number Met	9	10	10
Number Partially Met	1	0	0
Number Not Met	0	0	0
Rate Met	90.0%	100.0%	100%

Note: 0 = Not Met; 1= Partially Met; 2 = Met

Sources: Department of Health and Human Services Centers for Medicare & Medicaid Services (2003). Monitoring Medicaid Managed Care Organizations (MCOs) and Prepaid Inpatient Health Plans (PIHPs): A protocol for determining compliance with Medicaid Managed Care Proposed Regulations at 42 CFR Parts 400, 430, et al. Final Protocol Version 1.0.; BHC, Inc., 2004 External Quality Review Monitoring MCOs Protocols.

### Measurement and Improvement

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Missouri Care operated a Quality Management Oversight Committee made up of the Chief Executive Officer, Plan Administrator, Chief Medical Officer, and department managers. The goal of this group was to provide oversight of all operations and MCO initiatives. The MCO adopted and disseminated practice guidelines in the area of diabetes, asthma, chronic obstructive pulmonary disease (COPD), ADHD, and congestive heart failure. This information was available to all providers on the MCO website. Missouri Care indicated that they were in the process of developing practice guidelines for depression management. Disease management is directed from the MCO Corporate Office and covers asthma treatment, COPD, diabetes and CHF. Co-case Management can occur when it is in the member's best interest.

Sentinel events and quality of care issues are tracked to identify patterns that may evolve. Any suspected issue is taken to committee for discussion. If a problem is identified or suspected, follow-up occurs immediately. Outside review is then requested. Potential issues with providers in a facility have been addressed by facility staff.

The MCO submitted two Performance Improvement Projects (PIPs), which included enough information to complete validation. All Performance Measurement data and medical records requested were submitted for validation within requested timeframes. Missouri Care did have a health information system (HIS) capable of meeting the MC+ Medicaid Managed Care program requirements. The MCO also submitted all required encounter data in the format requested. The specific details can be found in the appropriate sections of this report.

The rating for the Measurement and Improvement section (100%) reflects that all required policy and procedure had been submitted to the SMA for their approval. It appeared that all practice observed at the time of the on-site review met the requirements of the MC+ Medicaid Managed Care contract and the federal regulations.



**Table 76 – Subpart D: Quality Assessment and Performance Improvement: Measurement and Improvement Yearly Comparison (Missouri Care)**

Federal Regulation	Missouri Care		
	2004	2005	2006
438.236(b)(1-4) Practice Guidelines: Adoption	2	2	2
438.236(c) Practice Guidelines: Dissemination	2	2	2
438.236(d) Practice Guidelines: Application	2	2	2
438.240(a)(1) QAPI: General Rules	2	2	2
438.240(b)(1) and 438.240(d) QAPI: Basic Elements of MCO Quality Improvement and PIPs	1	2	2
438.240(b)(2)(c) and 438.204(c) QAPI: Performance Measurement	1	2	2
438.240(b)(3) QAPI: Basic Elements/Over and Under Utilization	2	2	2
438.240(b)(4) QAPI: Basic Elements regarding Special Healthcare Needs	2	2	2
438.240(e) QAPI: Program Review by State	NA	NA	NA
438.242(a) Health Information Systems	2	2	2
438.242(b)(1,2) Health Information Systems: Basic Elements	1	2	2
438.242(b)(3) Health Information Systems: Basic Elements	1	2	2
Number Met	7	11	11
Number Partially Met	4	0	0
Number Not Met	0	0	0
Rate Met	63.6%	100%	100%

Note: Regulation 438.240(e) refers to program review by the state. The regulation requires the state to review, at least annually, the impact and effectiveness of each MCO's quality assessment and performance improvement program. The regulation refers to the state QA & I program review process and is not applicable to External Quality Review of the MC+ Managed Care Program. This percent is calculated for the regulations that are applicable to the MC+ Managed Care Program.

0 = Not Met; 1 = Partially Met; 2 = Met

Sources: Department of Health and Human Services Centers for Medicare & Medicaid Services (2003). Monitoring Medicaid Managed Care Organizations (MCOs) and Prepaid Inpatient Health Plans (PIHPs): A protocol for determining compliance with Medicaid Managed Care Proposed Regulations at 42 CFR Parts 400, 430, et al. Final Protocol Version 1.0.; BHC, Inc., 2004 External Quality Review Monitoring MCOs Protocols.

## Grievance Systems

The grievance system operated efficiently in this office. The MCO did report that when they receive provider complaints, these are reviewed by the provider representatives in the provider offices. They find that most of these complaints are the result of claims issues, such as timely filing. Many of these resulted from behavioral health providers who do not submit invoices within prescribed timeframes. The MCO believes this issue will be resolved with training and continued support from the provider representatives. The Medical Director is maintaining regular communications with the providers, resulting in fewer calls or formal complaints being filed.

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Four member grievances and two member appeals were reviewed during the on-site visit. Three of the grievances were resolved within the required timeframes. The fourth grievance was a quality of care issue that required four additional days to resolve. A letter was sent to the member regarding the continuation. One appeal was resolved by approving a formulary drug to fill a prescription. The second appeal went to a State Fair Hearing. The procedure in question did not meet requirements and the MCO decision was upheld. Both appeals were resolved within required timeframes. In reviewing the grievance and appeal logs it was noted that the MCO handled thirty member grievances and twelve appeals during 2006. Most were due to transportation or dental. There were six pertaining to medical issues. All were resolved in a timely manner.

Five provider complaints and one grievance were reviewed. All were resolved and notifications were sent within required timeframes. Provider complaints were received from 118 providers in 2006. The majority involved claims issues, namely timely filing.

All files reviewed were in order and all correspondence was dated according to policy timelines.

The rating for Grievance Systems (100%) reflects that all policy and practice met the requirements of the MC+ Medicaid Managed Care contract and federal requirements.

**Table 77 – Subpart F: Grievance Systems Yearly Comparison (Missouri Care)**

<b>Federal Regulation</b>	<b>Missouri Care</b>		
	<b>2004</b>	<b>2005</b>	<b>2006</b>
438.402(a) Grievance and Appeals: General Requirements	2	2	2
438.402(b)(1) Grievance System: Filing Requirements - Authority	2	2	2
438.402(b)(2) Grievance System: Filing Requirements - Timing	2	2	2
438.402(b)(3) Grievance System: Filing Requirements - Procedures	2	2	2
438.404(a) Grievance System: Notice of Action - Language and Format	2	2	2
438.404(b) Notice of Action: Content	2	2	2
438.404(c) Notice of Action: Timing	2	2	2
438.406(a) Handling of Grievances and Appeals: General Requirements	2	2	2
438.406(b) Handling of Grievance and Appeals: Special Requirements for Appeals	2	2	2
438.408(a) Resolution and Notification: Basic Rule	2	2	2
438.408(b,c) Resolution and Notification: Grievances and Appeals - Timeframes and Extensions	2	2	2
438.408(d)(e) Resolution and Notification: Grievance and Appeals - Format and Content of Notice	2	2	2
438.408(f) Resolution and Notification: Grievances and Appeals - Requirements for State Fair Hearings	2	2	2
438.410 Expedited Resolution of Appeals	1	2	2
438.414 Information about the Grievance System to Providers and Subcontractors	2	2	2
438.416 Recordkeeping and Reporting Requirements	2	2	2
438.420 Continuation of Benefits while Appeal/Fair Hearing Pends	2	2	2
438.424 Effectuation of Reversed Appeal Resolutions	2	2	2
Number Met	17	18	18
Number Partially Met	1	0	0
Number Not Met	0	0	0
Rate Met	94.4%	100%	100%

Note: 0 = Not Met; 1= Partially Met; 2 = Met

Sources: Department of Health and Human Services Centers for Medicare & Medicaid Services (2003). Monitoring Medicaid Managed Care Organizations (MCOs) and Prepaid Inpatient Health Plans (PIHPs): A protocol for determining compliance with Medicaid Managed Care Proposed Regulations at 42 CFR Parts 400, 430, et al. Final Protocol Version 1.0.; BHC, Inc., 2004 External Quality Review Monitoring MCOs Protocols

## Conclusions

Missouri Care made significant improvement in meeting all policy, procedure, and practice requirements to be in compliance with the MC+ Medicaid Managed Care contract and the federal regulations. The MCO utilized the tools produced by the 2005 External Quality Review as guidelines in ensuring that required written materials were submitted to the SMA in a timely and efficient manner. The staff within Missouri Care exhibited a commitment to quality and integrity in the work with their members. The MCO utilized unique processes, such as bringing the provision of behavioral health services into the organization, as a method for improving the

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access, quality and timeliness of member services. Missouri Care created tools to educate and inform the community and providers, evidenced by the efforts made to improve EPSDT examination numbers. The MCO demonstrated an attitude of respect toward their members in a number of outreach initiatives, as well as efforts to utilize software tools to better identify special healthcare needs. Missouri Care attempted to create a healthcare service system that was responsive and assisted members in overcoming the barriers they encounter in a largely rural area.

### **QUALITY OF CARE**

Quality of care is a priority for Missouri Care. Their attention to internal and external problem solving, supporting and monitoring providers, and participation in community initiatives are evidence of the commitment to quality healthcare. Missouri Care completed all policy requirements and has put processes in place to ensure that procedures and practices follow approved policy requirements. A commitment to obtaining quality service for members is evident in interviews with MCO staff, who express enthusiasm for their roles in producing sound healthcare for their members.

### **ACCESS TO CARE**

Missouri Care has made concerted efforts to ensure that members throughout their MC+ Region have adequate access to care. They have recruited additional hospitals and individual providers into their network. The MCO has participated in community events to promote preventive care and to ensure that members are aware of available services. This MC+ Region covers a diverse geographic area and the MCO exhibits an awareness of and commitment to resolving issues that are barriers to member services.

### **TIMELINESS OF CARE**

Missouri Care has developed procedures to ensure that policy is submitted in a timely manner and that all tracking tools are up-to-date. They are utilizing new case management software and systems tools to have the most accurate and up-to-date information available on members to support them in obtaining appropriate healthcare services in a timely manner. The MCO has engaged in a number of activities to ensure that organizational processes support the delivery of timely and quality healthcare.

## RECOMMENDATIONS

1. Continue MCO development in the area of utilization of available data and member information. This will drive change and create opportunities for further service development.
2. Continue working with school districts and other community-based entities throughout the Central Region to contact members for educational opportunities.
3. Continue monitoring access to dental care and assist in recruitment of providers throughout the Central Missouri MC+ Region.

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## 9.0 Children's Mercy Family Health Partners

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The previous sections of the 2006 EQRO report present the purpose and objectives, technical methods, procedures for evaluation, and MCO to MCO comparisons of analyses, findings, and recommendations for each of the protocols based on the aggregate analysis. This section of the EQRO report summarizes MC+ MCO specific methods, procedures, findings, and recommendations for improving the quality, timeliness, and access to care for MC+ Managed Care Members. Please refer to the main report for detailed technical objectives, methods, and presentation of data that are referenced here for the MC+ MCO.

## 9.1 Performance Improvement Projects

### METHODS

#### Document Review

Children's Mercy Family Health Partners supplied the following documentation for review:

- Improving Well Child Visits in the First 15 Months of Life
- Improving Access to Primary Care Services

Additionally the MC+ MCO supplied additional data at the time of the on-site review, as promised with the original data submission.

#### Interviews

Interviews were conducted with the project leaders for each Performance Improvement Project (PIP) by the EQRO team on March 8, 2006 during the on-site review, and included the following:

Ma'ata Touslee – Director, Health Services

Jenny Hainey – Manager, Quality Management

Lisa Gable – Manager, Health Services

Augusta Amadi – Case Manager

Melody Derks -- Special Programs Coordinator, MO Lead Poisoning Prevention Care Manager

Johanna Groves -- Senior Quality Management Nurse

Interviewees shared information on the validation methods, study design, and findings. Technical assistance regarding study design and presentation of findings was provided by the EQRO. The following questions were addressed:

- What activities were added to the Access to Primary Care project for 2006
- Was the population for the study expanded?
- How was the accuracy, consistency, and validity assured?
- What findings were relevant to the MC+ population?
- How was improvement analyzed?
- What are the conclusions about the effectiveness of the interventions analyzed?

## FINDINGS

The first PIP evaluated was “Improving Well-Child Visits in the First 15 Months of Life.” The study topic was well developed based on the MC+MCO’s HEDIS rates as compared to the HEDIS Medicaid mean and the Missouri Medicaid mean. The MC+MCO identified a decrease in their rate for the period from 2000 to 2005 and chose this topic to improve this measure as an important preventive member in child health. The study focused on correcting deficiencies in care of any member who should be receiving the well-child visits. No members were excluded who fell within the spectrum of the query date identified.

The hypothesis utilized in this study was: Children whose parents receive letters containing education about well-child care will be more likely to:

- Schedule a well child visit
- Receive annual EPSDT exams
- Receive recommended immunizations per schedule

These families are less likely to:

- Have sick child visits
- Miss recommended immunizations

The study question employed in this study was “Do reminder letters to the parents of children ages 0-15 months, who need Well-Child exams, result in an increased rate of screenings?” The study question is simple and focused. The approach utilized allowed the MC+MCO to analyze if this single intervention is effective, prior to addressing broader causes or barriers to members

receiving these services. It is possible for this study to evolve and become more complex in time.

The study indicator was the rate of well-child visits in the first 15 months of life for children in the study group. The study group included children identified in a query based on a specific date for the ages of the children involved, and who had received 0 to six well child visits. The indicators measured would indicate a change in health status and is focused on the issue of improving preventive care. The issues that can be tracked are delineated in the hypotheses. The query group was defined as children within a specific birth range. These members were tracked throughout the intervention.

The study planned to query claims data to create baseline statistics. Additional queries occurred at six month intervals to obtain data on visits that occurred after the intervention. The narrative clearly defined the sources of data and a systematic approach to obtaining data that provided confidence that it would be valid and reliable. At the time of the on-site review additional information was provided that gave confidence that the data collection plan and process was consistent and accurate. A prospective data analysis plan was documented. It was based on the measurement of increased well-child visits post intervention.

Reasonable interventions were developed. These included direct member contact through letters and by telephone. The information provided included the requirements for these visits and the recommended well-care schedule. This educational material included EPSDT information.

The documentation received did include an interim assessment of improvement. The information provided did indicate an overall improvement in members obtaining well-child visits. The graphs and charts provided were somewhat confusing as there was not a correlation in the narrative comparing the baseline and remeasurement data. The analysis provided did not thoroughly explain the data and the results.

The documentation did include a plan for improvement after the completion of the initial intervention. It can be inferred that the initial intervention did have positive impact on member behavior. The plan for improvement indicates that new interventions are planned to create additional positive results for members receiving well-child visits in the first 15 months of life.

The study does need continued development to enable the MC+MCO to assess the effectiveness of the intervention strategies and to obtain significant and sustained improvement.

The second PIP evaluated was “Improved Access to Primary Care Services.” This was submitted as a non-clinical Performance Improvement Project. The study topic was explained in detail and justified in the narrative. The presentation was based on the MC+ MCO’s previous findings and project plan for this ongoing PIP. This information was not based on any external information or literature review. This information may add depth to this project, which is based on sound reasoning and clearly identified local need. This project was a continuation of the previous year’s attempt to impact inappropriate use of emergency room services. The presentation is very well developed, but could have been enhanced by conducting a literature review and citing research conducted at the national level.

The project was clearly focused on correcting deficiencies in MC+ Member health care. It was based on the following hypothesis:

- Members are utilizing Emergency Room services for non-emergent needs, in some cases, in place of utilizing a Primary Care Physician; and
- Providing direct contact and assistance to the members in accessing a Primary Care Provider or Urgent Care Center for non-emergent services, will decrease ER visits overall and increase access to Primary Care services.

The project was open to all members using the emergency room for non-emergent medical services at Truman Medical Center ER during the 4-6 hours each day that the CMFHP case manager is present. The focus of the study was on the any member of the adult population who resides in the nine county MC+ Western Region and meets the eligibility requirements for MC+ Managed Care benefits. The study questions posed in the documentation were:

- Does placing a case manager in the emergency room (ER) during peak hours for education of members reduce overall ER utilization in the adult population?
- Does placing a case manager in the ER during peak daytime hours for education of member increase overall utilization of primary care services for the adult population?
- Does education to members regarding availability of Nurse Advice services during an ER visit increase utilization of those services in the future?

The study questions were clearly stated and assist in answering the questions raised in the topic discussion. The key indicators that the study focused on included: the rates of nurse-advice line calls per 1000 members; the rate of ER utilization per 1000 members; and utilization patterns before and after intervention, including ER utilization, Urgent Care utilization, and PCP utilization for the study population. These indicators were thoroughly defined in the narrative and included specific measurement guidelines and data collection details. The indicators specify improvement in members' ability to obtain appropriate medical interventions for themselves. The measurement process included quarterly claims data queries, identification of the study population to ensure proper utilization pattern identification, and quarterly call center data review.

The study population, identified in the narrative documentation, was MC+ MCO members seeking care at the Truman Medical Center ER with a non-emergent diagnosis, who appear during the 4-6 hours each day that the case manager is present. MC+ MCO members are MC+ Medicaid Managed Care recipients in the nine county Western MC+ Managed Care Region. No actual sampling was conducted.

The documentation included a prospective data analysis and collection plan for the 2004 through 2006 portion of this study that is appropriately detailed. Data will be collected on each member seen in the ER including demographics, reason for visit, education provided, barriers identified, and interventions completed. Members were to be followed to document pre and post intervention compliance with the agreed upon treatment plan. Data analysis was to be performed using control charting, measurements of pre and post-intervention effectiveness, assessment of study variables, and ER statistics.

Data sources were defined and specific. Controls for validity, particularly for Nurse Advice Line statistics, or other case management data were not clearly identified. The study plan called for reporting to the MC+ MCO Internal Utilization Management Committee and Medical Oversight Committee on a regular basis. Periodically the Consumer Advisory Committee will receive updates on the project as well. The MC+ MCO was also working with a statistician from the University of Missouri – Kansas City to ensure that all data was collected, analyzed, and utilized in the most efficient and productive manner.

The main intervention planned was the placement of the case manager in the Truman Medical Center emergency room. The details of the activities required were included in the narrative. These activities included direct contact with the member before or after being seen by the physician, education of the member on how to access PCP services, assistance with PCP choice when necessary, education on how to obtain non-emergency transportation, and education of the use of the Nurse Advice service and other community resources. Referrals will be made for more focused disease management if this service is needed. This appeared to be a reasonable and creative intervention to impact a problem that is reflected in comments from all MC+ MCOs.

Data analysis was completed for the baseline year 2003, and the three subsequent years 2004, 2005 and 2006. Analysis of the population service, including some demographic breakdown was included. Additional analysis looked at the statistics for the members who received ER case management and education compared to the general MC+MCO population. Refining the member population to be followed, particularly for the entire post-intervention period was conducted in 2006. The numbers were affected by a change in Medicaid eligibility which occurred in the second half of 2005. The data analysis plan is detailed and comprehensive and promised to produce significant results. The overall findings indicated that there is a decrease in ER utilization for this population of 5.6%. This is not a large percentage, but does indicate that there is a trend in reducing adult ER visits for the MC+MCO population. There could be no conclusions drawn about the use of the nurse advice line due to a change in the way that calls are collected and reported. No pre-intervention statistics are available for comparison. These calls will continue to be monitored to ensure that consistent data analysis is available for future years.

A statistical analysis of the ER data was completed by an UMKC statistician. A paired sample t-test was performed. This testing illustrated that the current intervention is not having a statistically significant positive impact on the inappropriate use of the ER at this time. The MC+MCO did develop recommendations for change to this study including research into the post intervention medical care received by members in regard to office visits and PCPs. The initial information indicated that the project had a positive impact on MC+ Member health care services. The use of the statistician to assist with data analysis added confidence in the validity of the results yet to be published. This project continues to be well-constructed and promises

to produce significance results that could positively influence how MC+ Members are educated about obtaining appropriate and effective health care services.

## CONCLUSIONS

### QUALITY OF CARE

Quality services are provided in the most appropriate environment, and in a preventive manner, whenever possible. These two projects embodied these values and sought to enhance the services available to the MC+MCO members. Quality healthcare is evident in the types of interventions used in these projects. The strong reliance on a case management and personal approach to educating and assisting members is evidence of the commitment to quality services to members.

### ACCESS TO CARE

The focus of both of the Performance Improvement Projects developed by the MC+MCO indicated a strong commitment to improving access to the best healthcare in the most appropriate medical setting. In the first PIP the MC+MCO provided education about the importance of accessing preventive healthcare services. In the second project reviewed the MC+MCO attempted to provide education and support to adults to ensure that they had alternatives to ER utilization for non-emergent healthcare needs.

### TIMELINESS TO CARE

The PIP regarding Well-Child Visits in the First 15 Months of Life concentrated on timely preventive care for children in this age range. The educational approach taken by this PIP empowers families to make sound decisions that can lead to continued efforts to obtain timely preventive healthcare services on an ongoing basis. The PIP that focused on correct use of emergency room services also shows the MC+MCO plan's understanding of the importance of timely healthcare. The project sought to ensure that members had connections to their own PCP to enable ongoing healthcare in the most appropriate setting.

## RECOMMENDATIONS

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1. Continue the work the MCO is doing with the statistician to perfect PIP methodology and data analysis.
2. Incorporate a literature review or research on topics to support the decision to embark upon a study topic.
3. Include the names, titles, and responsibilities of all MC+MCO staff involved in the PIP.

## 9.2 Validation of Performance Measures

### METHODS

This section describes the documents, data, and persons interviewed for the Validation of Performance Measures for Children's Mercy Family Health Partners. Children's Mercy Family Health Partners submitted the requested documents on January 3, 2007. The EQRO reviewed documentation between January 3, 2007 and May 1, 2007. On-site review time was used to conduct follow-up questions and provide feedback and recommendations regarding the performance measure rate calculation.

### Document Review

The following are the documents reviewed by the EQRO:

- The Baseline Assessment Tool (BAT) submitted by Children's Mercy Family Health Partners for the HEDIS 2006 data reporting year
- Information Systems Capabilities Assessment (ISCA) submitted by Children's Mercy Family Health Partners
- Qualis Health's NCQA HEDIS Compliance Audit Report for HEDIS 2006
- Children's Mercy Family Health Partners' information systems (IS) Policies and Procedures pertaining to HEDIS 2006 rate calculation
- Children's Mercy Family Health Partners' information services (IS) policies on disaster recovery
- Children's Mercy Family Health Partners' HEDIS 2005 implementation work plan and HEDIS committee agendas for 2006
- Children's Mercy Family Health Partners' HEDIS 2006 Training Manual for the medical record review process
- Documentation, data files and source code of the in-house application for immunization rate calculation
- System edits for the claims management system

The following are the data files submitted by Children's Mercy Family Health Partners for review by the EQRO:

- FUH\_Denom\_Num\_Data.txt
- FUH\_Enrollment.txt

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- PPC\_Denom\_Num\_Data.txt
- PPC\_Enrollment.txt
- PPC\_Hybrid.txt
- W34\_Denom\_Num.txt
- W34\_Enrollment.txt
- W34\_Hybrid.txt

The Information Systems Capabilities Assessment (ISCA) review was conducted by the EQRO according to Appendix Z of the Validating Performance Measures protocol. The EQRO Project Director and Research Analyst reviewed all ISCA information provided by the plan. Follow-up reviews were conducted with Children's Mercy Family Health Partners staff during on site reviews. The review of CMFHP focused on CMFHP's ability to accurately report Medicaid data as required by State and Federal regulation. To fulfill it's obligations as a Medicaid contractor, CMFHP must demonstrate that it has the automated systems, management practices, data control procedures and rate calculation procedures required in place to assure that the data is adequately captured, stored, translated, analyzed, and reported.

The EQRO found that Children's Mercy Family Health Partner's Information Systems (IS): 1) contained complete and accurate encounter data, as specifically detailed in CMFHP's Validation of Encounter Data section (Section 9.3) of this report; 2) correctly calculated the performance measures reviewed, as specifically detailed below in this Validation of Performance Measure section of the report; 3) contributed to CMFHP's ability to conduct quality assessment and improvement initiatives, as specifically detailed in CMFHP's Compliance with Managed Care Regulations section of this report (Section 9.4); and 4) allowed CMFHP to oversee and manage the delivery of health care to its enrollees, as specifically detailed below in the Conclusions subsection of this section (Section 9.2) of the report.

## Interviews

The EQRO conducted on-site interviews with Janet Benson, Johanna Groves, and Bob Clark, Jenny Hainey at the Children's Mercy Family Health Partners in Kansas City on Thursday, August 2, 2007. This group was responsible for calculating the HEDIS performance measures. The objective of the visit was to verify the data, methods and processes behind the calculation of the three HEDIS 2006 performance measures.

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## FINDINGS

Children's Mercy Family Health Partners used the Administrative Method for calculation of the Follow-Up After Hospitalization for Mental Illness measure. The Hybrid Method was used for the Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life and Prenatal and Postpartum Care measures. MCO to MCO comparisons of the rates of Follow-Up After Hospitalization, Well-Child Visits, and Prenatal and Postpartum Care measures were conducted using two-tailed z-tests. For comparisons that were statistically significant at the 95% confidence interval (CI), the z-score (z), the upper and lower confidence intervals (CI), and the significance levels ( $p < .05$ ) were reported.

The rate for the HEDIS 2006 Well Child Visits in the Third, Fourth, Fifth and Sixth Years of Life was reported to the SMA and the State Public Health Agency (SPHA) by Children's Mercy Family Health Partners was 72.75%. This was significantly higher than the statewide rate for MC+ MCOs (58.23%;  $z = -.50$ ; 95% CI: 52.67%, 64.88%;  $p > .95$ ).

The rate for the HEDIS 2006 Prenatal and Postpartum Care measure reported to the SMA and the State Public Health Agency (SPHA) by Children's Mercy Family Health Partners was 75.43% for timeliness of prenatal care and 56.69% for postpartum care. The rate reported for timeliness of prenatal care was comparable to the statewide rate for MC+ MCOs (53.30%;  $z = -.57$ ; 95% CI: 36.80%, 67.63;  $p < .05$ ). The rate reported for postpartum care was comparable to the statewide rate for all MC+ MCOs (44.54%;  $z = -.98$ ; 95% CI: 28.37%, 59.20%;  $p < .05$ ).

The reported rate for Children's Mercy Family Health Partners for the 2006 HEDIS Follow-Up After Hospitalization for Mental Illness was 45.15% for follow-up after 7 days and 71.52% for follow-up after 30 days. The rate reported for 7-day follow-up was significantly higher than the statewide rate for MC+ MCOs (31.16%,  $z = -1.20$ ; 95% CI: 16.56%, 37.57%;  $p < .05$ ). The rate reported for 30-day follow-up was also significantly higher than the statewide reported rate for MC+MCOs (52.92%,  $z = -.43$ ; 95% CI: 39.53%, 59.95%;  $p < .05$ ).

The following sections summarize the findings of the process for validating each of the performance measures in accordance with the Validating Performance Measures Protocol. The findings from all review activities are presented according to the EQRO validation activity, with

the findings for each measure discussed within the activities as appropriate. Please refer to the tables in the main report for activities, ratings, and comments related to the CMS Protocol Validating Performance Measures Attachments.

### **Data Integration and Control**

The information systems management policies and procedures for rate calculation were evaluated consistent with the Validating Performance Measures Protocol. This included both manual and automatic processes of information collection, storing, analyzing and reporting. The EQRO was provided with a demonstration of the in-house application developed for calculation of the immunization measure, which used an MS Access data repository for retrieval and analysis.

For all three measures, Children's Mercy Family Health Partners was found to meet all criteria for producing complete and accurate data (see CMS Protocol Validating Performance Measures Attachment V: Data Integration and Control Findings). There were no biases or errors found in the manner in which they transferred data into the repository used for calculating the HEDIS 2006 measures. Children's Mercy Family Health Partners used an external vendor application module for rate calculation. The MC400, a product of OAO HealthCare Solutions, Inc was part of the claims management system. The module was NCQA-certified for the 2002 HEDIS rate calculation, but the vendor had not sought certification since that HEDIS year. The EQRO was provided with a demonstration of the MC400, along with the data flow and integration mechanisms for external databases for these measures.

### **Documentation of Data and Processes**

Data and processes used for the calculation of measures were adequate, as Children's Mercy Family Health Partners had worked diligently within the last year to significantly improve documentation of their processes. (See CMS Protocol Validating Performance Measures Attachment VII: Data and Processes Used to Calculate and Report Performance Measures). Children's Mercy Family Health Partners met all criteria applicable for all three measures.

### **Processes Used to Produce Denominators**

Children's Mercy Family Health Partners met all criteria for the processes employed to produce the denominators of all three performance measures (see CMS Protocol Validating Performance

Measures Attachment X: Denominator Validation Findings). This involved the selection of eligible members for the services being measured. For the Follow-Up After Hospitalization measure, a total of 330 eligible members were reported and validated by the EQRO. For the denominator of the Well Child Visits measure a sample of 411 eligible members were reported and validated. Age ranges, dates of enrollment, medical events, and continuous enrollment were programmed to include only those members who met HEDIS 2006 criteria.

For the Prenatal and Postpartum Care measure a sample of 411 eligible members was reported and validated.

### **Processes Used to Produce Numerators**

All three measures included the appropriate data ranges for the qualifying events (e.g., well-child visits, follow-up visits and prenatal/postpartum visits) as specified by the HEDIS 2006 criteria (see CMS Protocol Validating Performance Measures Attachment XIII: Numerator Validation Findings).

For the HEDIS 2006 Follow-Up After Hospitalization measure, the EQRO's review of the administrative hits validated 146 of the 149 reported by the MCO for the 7-day follow-up. The rate calculated by the EQRO was 44.24%, with a bias of 0.91%, an overestimate by the MCO in the reporting of the measure. The EQRO validated 233 of the 236 administrative hits reported by the MCO for the 30-day follow-up measure. The rate calculated by the EQRO was 70.61%, with a bias of 0.91%, an overestimate by the MCO in the reporting of the measure.

Children's Mercy Family Health Partners used the Hybrid Method to calculate HEDIS 2006 Well-Child Visits measure. Twenty-nine (29) of 30 medical records requested were received; 16 records resulted in validated hybrid hits. As a result, the medical record review validated 41 of the 76 hybrid hits reported. Based on the number of hits validated by the EQRO, the rate calculated was 64.12%. The total estimated bias for the Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life measure was an 8.63% overestimate of the rate.

Children's Mercy Family Health Partners used the Hybrid Method to calculate HEDIS 2006 Prenatal and Postpartum Care measure. Thirty (30) of 30 records requested were received; 29 records resulted in validated hybrid hits for the Prenatal portion of the measure. As a result,

the medical record review validated 283 of the 293 hybrid hits reported for the Timeliness of Prenatal Care portion of the measure. Review of the administrative hits validated 17 of the 17 hits found by the MCO. Based on the number of hits validated by the EQRO, the rate calculated was 73.07%. The total estimated bias for Prenatal and Postpartum Care (Timeliness of Prenatal Care) measure was a 2.35% overestimate of the rate. 23 records resulted in validated hybrid hits for the Postpartum portion of the measure. As a result, the medical record review validated 47 of the 61 hybrid hits reported for the Postpartum portion of the measure. Review of the administrative hit validated 172 of the 172 hits found by the MCO. Based on the number of hits validated by the EQRO, the rate calculated was 53.23% for the Postpartum portion of the measure. The total estimated bias for the Prenatal and Postpartum Care (Postpartum) measure was a 3.46% overestimate of the rate.

### **Sampling Procedures for Hybrid Methods**

The Hybrid Method was used for the Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life and the Prenatal and Postpartum Care measures. [CMS Protocol Validating Performance Measures Attachment XII](#); Impact of Medical Record Review Findings and [CMS Protocol Validating Performance Measures Attachment XV](#): Sampling Validation Findings were completed for each of these measures. Children's Mercy Family Health Partners was compliant with all specifications for sampling processes.

### **Submission of Measures to the State**

Children's Mercy Family Health Partners submitted the DST for each of the three measures validated to the SPHA (the Missouri Department of Health and Senior Services) in accordance with the Code of State Regulations (19 CSR §10-5.010 Monitoring Health Maintenance Organizations) and the SMA Quality Improvement Strategy.

### **Determination of Validation Findings and Calculation of Bias**

The following tables summarize the estimated bias in reporting each of the measures and the final validation findings. Table 78 shows a small overestimate (inside the 95% confidence interval) for all rates.

**Table 78 - Estimate of Bias in Reporting of HEDIS 2005 Measures**

Measure	Estimate of Total Bias	Direction of Estimate
Follow-Up After Hospitalization for Mental Illness (7 day)	0.91%	overestimate
Follow-Up After Hospitalization for Mental Illness (30 day)	0.91%	overestimate
Well Child Visits in the Third, Fourth, Fifth and Sixth Years of Life	8.27%	overestimate
Prenatal and Postpartum Care (Timeliness of Prenatal)	2.35%	overestimate
Prenatal and Postpartum Care (Postpartum Care)	3.46%	overestimate

## Final Audit Rating

The Final Audit Rating for each of the performance measures was based on the findings from all data sources that were summarized in the Final Performance Measure Validation Worksheet.

Table 79 shows the final audit findings for each measure. All measures were Substantially Compliant, as there was no significant bias associated with the overestimated rates.

**Table 79 - Final Audit Rating for HEDIS 2005 Performance Measures**

Measure	Final Audit Rating
Follow-Up After Hospitalization for Mental Illness (7 day)	Substantially Compliant
Follow-Up After Hospitalization for Mental Illness (30 day)	Substantially Compliant
Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life	Not Valid
Prenatal and Postpartum Care (Timeliness of Prenatal Care)	Substantially Compliant
Prenatal and Postpartum Care (Postpartum Care)	Substantially Compliant

Note: Fully Compliant = Measure was fully compliant with State specifications; Substantially Compliant = Measure was substantially compliant with State specifications and had only minor deviations that did not significantly bias the reported rate; A significant bias in the rate was defined as a number calculated by the EQRO that fell outside the 95% confidence interval of the rate reported by the MCO. Not Valid = Measure deviated from State specifications such that the reported rate was significantly biased. This designation is also assigned to measures for which no rate was reported; Not Applicable = No MC+ Members qualified for the measure.

## CONCLUSIONS

Five rates were validated for the MCO. Two of these rates were consistent with; and three were significantly higher than the average for all MC+ MCOs.

## QUALITY OF CARE

Children's Mercy Family Health Partner's calculation of the HEDIS 2006 Follow-Up After Hospitalization for Mental Illness measure was substantially compliant with specifications. This measure is categorized as an Effectiveness of Care measure and is designed to measure the effectiveness/quality of care delivered. The MCO's 7-day follow-up and 30- day follow up rates for this measure were significantly higher than the average for all MC+ MCOs. Thereby, Children's Mercy Family Health Partner's members are receiving a quality of care for this at a higher level than the care delivered to the average MC+ member. Additionally, both of these rates were reported as higher than the National Medicaid Rate, thereby CMFHP is delivering a higher level of quality than that received by the average Medicaid member across the nation.

The EQRO was able to validate this rate within the reported 95% confidence intervals and thereby has substantial confidence in the calculated rate.

## ACCESS TO CARE

The MCO's calculation of the HEDIS 2006 Prenatal and Postpartum Care measure was substantially compliant. This measure is categorized as an Access/Availability of Care measure and is designed to measure access to the care defined. The MCO's reported rate for both of this measures rates (Prenatal Care and Postpartum Visits) were comparable to the average for all MC+ MCOs. Thereby, Children's Mercy Family Health Partners' members are receiving the access to care for this measure consistent with the care delivered to all other MC+ members.

The EQRO was not able to validate this measure within the reported 95% confidence intervals and thereby designates this rate as not valid.

## TIMELINESS OF CARE

The MCO's calculation of the HEDIS 2006 Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life measure was substantially compliant. This measure is categorized as an Use of Services measure and is designed to measure the timeliness of care received. The MCO's reported rate for this measure was significantly higher than the average for all MC+ MCOs. Thereby, Children's Mercy Family Health Partners' members are receiving the timeliness of care for this measure at a higher level than the care delivered to all other MC+ members. Additionally, this rate was reported at higher than both the National Medicaid and National

Commercial Rates, thereby the MCO is delivering a higher level of care than that received by the average Commercial or Medicaid member across the nation.

The EQRO was able to validate this rate within the reported 95% confidence intervals and thereby has confidence in the calculated rate.

## RECOMMENDATIONS

1. Continue to conduct and document statistical comparisons on rates from year to year.
2. The number of medical record hits that the EQRO was able to reproduce for the Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life was extremely low. Children's Mercy Family Health Partners should examine the criteria used to find a well-child visit.

## 9.3 Validation of Encounter Data

### FINDINGS

The findings for the encounter data validation are organized according to the encounter data evaluation questions presented in the Technical Methods section for the encounter data validation in the aggregate report. Please refer to the main report for detailed objectives, technical methods and procedures for encounter data validation.

#### What is the Baseline Level of Completeness, Accuracy, and Reasonableness of the Critical fields?

For the Medical claim type, there were 97,435 encounter claims paid by the SMA for the period July 1, 2006 through September 30, 2006.

1. The Outpatient Claim Type field was 100.00% complete, accurate and valid.
2. The Outpatient Recipient ID field was 100.00% complete, accurate and valid.
3. The Outpatient First Date of Service field was 100.00% complete, accurate and valid.
4. The Outpatient Last Date of Service field was 100.00% complete and accurate, and valid.
5. The Outpatient Units of Service field was 100.00% complete accurate and valid.
6. The Outpatient Procedure Code field was 100.00% complete accurate and valid.
7. The Outpatient Place of Service field was 100.00% complete, accurate and valid.
8. The first Diagnosis Code field was 100.00% complete, accurate and valid.
9. Although the second through fifth Diagnosis Code fields are optional according to the Health Plan Record Layout Manual, the second, third, and fourth Diagnosis Code fields were well below the SMA threshold of 100.00% completeness, accuracy and validity. The second, third, fourth and fifth Diagnosis Code field were (42.78%, 0.03%, 0.01%, and 0.00%) complete, accurate and valid, respectively. The remaining fields were blank (incomplete, inaccurate, and invalid).

For the Dental claim type, there were 18,240 encounter claims paid by the SMA for the period July 1, 2006 through September 30, 2006. The first Diagnosis Code field, were 100.00% complete, accurate and valid. The second, third, fourth and fifth Diagnosis Code fields were 0.00% complete, accurate and valid. The remaining fields were blank (incomplete, inaccurate, and invalid).

For the Home Health claim type, there were zero (0) encounter claims paid by the SMA for the period July 1, 2006 through September 30, 2006.

For the Inpatient claim type, there were 12,432 encounter claims paid by the SMA for the period July 1, 2006 through September 30, 2006.

1. The Inpatient Claim Type field was 100.00% complete, accurate and valid.
2. The Recipient ID field was 100.00% complete, accurate and valid.
3. The Admission Type field was 100.00% complete, accurate and valid.
4. The Admission Date field was 100.00% complete and accurate; and 96.24% valid. There were 576 invalid dates ranging from 12/01/2005 – 12/31/2005.
5. The Discharge Date field was 100.00% complete and accurate; and 96.50% valid. There were 536 invalid dates ranging from 04/01/2005 – 05/23/2005.
6. The Bill Type field was 100.00% complete, accurate and valid.
7. The Patient Status field was 100.00% complete, accurate and valid.
8. The first Diagnosis Code field was 100.00% complete, accurate and valid.
9. All other Diagnosis Code fields fell well below the 100% threshold for completeness, accuracy, and validity established by the SMA. The second, third, fourth, and fifth Diagnosis Code fields were 89.30%, 1.60%, 1.19%, and 0.61% complete, accurate and valid, respectively. The remaining fields were blank (incomplete, inaccurate, and invalid).
10. The First Date of Service field was 100.00% complete, accurate and valid.
11. The Last Date of Service field was 100.00% complete, accurate and valid.
12. The Revenue Code field was 99.94% complete, accurate, and valid. There were 7 fields left blank.
13. The Units of Service field was 100.00% complete, accurate and valid.

For the Outpatient Hospital claim type, there were 76,618 encounter claims paid by the SMA for the period July 1, 2006 through September 30, 2006.

1. The Outpatient Hospital Claim Type field was 100.00% complete, accurate and valid.
2. The Recipient ID field was 100.00% complete, accurate and valid.
3. The First Date of Service field was 100.00% complete and accurate, and valid.
4. The Last Date of Service field was 100.00% complete and accurate, and valid.
5. The Units of Service field was 100.00% complete, accurate and valid.
6. The Outpatient Procedure Code field was 98.17% complete and accurate, and 98.16% valid. This field requires five alphanumeric characters. There were 1400 blank fields and 9 invalid fields of “00000”.
7. The Outpatient Hospital Revenue Code field was 100.00% complete and accurate, and valid.

8. The first Diagnosis Code field was 100.00% complete, accurate and valid.
9. Although the second through fifth Diagnosis Code fields are optional according to the Health Plan Record Layout Manual, the second, third, fourth, and fifth Diagnosis Code fields were well below the 100% threshold for completeness, accuracy and validity set by the SMA. The second, third, fourth and fifth Diagnosis Code fields were 55.46%, 0.16%, 0.09% and 0.03% complete, accurate and valid, respectively. The remaining fields were blank (incomplete, inaccurate, and invalid).

For the Pharmacy claim type, there were 58 claims paid by the SMA for the period July 1, 2006 through September 30, 2006. All fields examined were 100.00% complete, accurate and valid data for all fields examined. It is important to note that the MC+ MCO had pharmacy claims “carved-out” of their contract with the SMA that began on July 1, 2006. This explains the extremely low numbers of encounter claims during the time period reviewed.

### **What Types of Encounter Claim Data are Missing and Why?**

Based on the above analysis of the accuracy, completeness, and validity of the data in the SMA encounter claims extract file for Family Health Partners, an error analysis of the invalid entries was conducted for fields which were lower than the 100.00% threshold specified by the SMA. The critical fields examined for the Dental and Pharmacy claim type fields were 100.00% complete, accurate, and valid (see previous findings). The Outpatient Procedure Code fields in the Medical and Hospital claim types contained invalid procedure codes. The Outpatient Medical claim type contained invalid codes in the Revenue Code fields.

### **What is the Level of Volume and Consistency of Services?**

When comparing the rate of encounter claim types per 1,000 members, the rates of Inpatient, Medical, Pharmacy, and Hospital claim types were consistent with the average for all MC+ MCOs, while the rates for Dental claim types were significantly higher than the average for all MC+ MCOs. This suggests that the data are complete and that there is better utilization of dental services and high rates of access to preventive and acute care among Family Health Partners members.

## To What Extent do the Claims in the State Encounter Claims Database Reflect the Information Documented in the Medical Record? What is the Fault/Match Rate between State Encounter Claims and Medical Records?

To examine the degree of match between the SMA encounter claims database and the medical record, 100 encounters from each MC+ MCO were randomly selected from Medical claim types for the period of July 1, 2006 through September 30, 2006 for medical record review. Of the 204,783 encounter claim types in the SMA extract file for July 1, 2006 through September 30, 2006, 100 encounters were randomly selected. Providers were requested to submit medical records for review. There were 100 medical records (100.0%) submitted for review. Encounters for which no documentation was submitted were unable to be validated. The match rate for procedures was 72.0%, with a fault rate of 28.0%. The match rate for diagnoses was 64.0%, with a fault rate of 36.0%.

### What Types of Errors Were Noted?

An error analysis of the errors found in the medical record for procedure and diagnosis codes was conducted. For the diagnosis code in the medical record, the reasons for diagnosis codes not matching the SMA extract file was missing information ( $n = 36$ ) with no incorrect information. The diagnosis code listed did not match the descriptive information in the record.

For the procedure code in the medical record, the reasons for procedure codes in the SMA extract file not being supported by documentation in the medical record were missing information ( $n = 25$ ) and upcoding ( $n=3$ ). Examples of missing information included no code, codes listed that were not supported, or codes that did not match the procedure description.

### What Problems are there with How Files are Compiled and Submitted by the MC+ MCO?

Since Children's Mercy Family Health Partners included internal control numbers that matched those of the SMA, the EQRO conducted the planned analyses comparing MC+ MCO encounter data to the SMA encounter claim extract file. The SMA defined “unpaid claims” as those claims that the MCO denied for payment, unpaid claims do not include claims paid via a capitation plan. MC+ MCOs were requested to submit data, as specified by the EQRO (see Appendix 6), for the MC+ Managed Care Members represented in the encounter claim sample selected for validation.

For the Pharmacy Claim type, all encounter data submitted to the EQRO was of “paid” status. There were 0 unmatched claims that were in the CMFHP encounter file and absent from the SMA data.

For all Outpatient Claim Types (Medical, Dental, Home Health and Hospital), CMFHP submitted 192,293 “paid” encounters and 242 “denied” claims. All paid encounter claims matched with the SMA encounter claim extract file. The 242 denied claims were not present in the SMA database (as expected); there was a “hit” rate of 99.87% between CMFHP’s encounter claims and the SMA encounter data.

For the Inpatient Claim Type, CMFHP submitted 12,432 encounter claims of “paid” status and 188 “denied” claims. All paid encounter claims matched with the SMA encounter claim extract file. The denied claims were not present in the SMA database. This produced a “hit” rate of 98.47% between CMFHP’s encounter claims and the SMA encounter data.

### **Why are there unmatched claims between the MC+ MCO and SMA data files?**

The unmatched encounters are due to missing ICN numbers which are required to match the encounter to that of the SMA. Therefore, in all claim types, the encounter claims were legitimately missing from the SMA extract data.

### **What are the Data Quality Issues Associated with the Processing of Encounter Data?**

While the MC+ MCO did submit the data in the requested format (including most ICN numbers), there are a number of ways to improve the data quality by improving the database system. As the Internal Control Number is only assigned by the State database when a claim is paid, it is difficult to match the MC+ MCO data of “unpaid” and “denied” claims to the SMA data. As the Internal Control Number is unique only to the encounter, the ICN may be represented in multiple lines of data. To match the MC+ MCO data to the SMA data to specific fields, this requires a unique line number. Therefore each service provided within an encounter would have a separate line of data with a unique line identifier.

## STRENGTHS

1. Encounter data was submitted to the EQRO in the requested format which allowed encounter validation for all claim types.
2. The critical field validation of all six claim types resulted in few fields under the SMA established threshold of 100.00% accuracy, completeness, and validity.
3. The critical fields evaluated for the Outpatient Medical, Dental and Pharmacy claim types were 100.00% complete, accurate, and valid.
4. The rate of Dental and Outpatient Hospital claim types were significantly higher than the average for MC+ MCOs, suggesting high rates of encounter data submission and at least moderate access to preventive and acute care.

## AREAS FOR IMPROVEMENT

1. The Admission Date, Discharge Date, and Revenue Code fields for the Inpatient claim type contained invalid codes.
2. The Outpatient Procedure Code fields in the Outpatient Hospital claim type contained invalid codes.
3. The match rate between the medical record and SMA encounter claims data was comparable to the average for all MC+ MCOs for the procedure code.
4. The MCO reported no Home Health encounter claims during the review period.

## RECOMMENDATIONS

1. Examine and revise as needed internal system edits for invalid procedure codes in the NSF/CMS 1500 file layout for the Outpatient Procedure Code and run validity checks after the programming of new edits.
2. Ensure that the Inpatient Admission Date, Discharge Date and Revenue Code fields are complete and valid for the Inpatient claim types, and institute error checks to identify invalid data.

## 9.4 MCO Compliance with Managed Care Regulations

### METHODS

Prior to the site visit, documentation was received and reviewed regarding the MCO's compliance with the State contract. The External Quality Review Organization (EQRO) reviewed contract documents with the staff of the Division of Medical Services (DMS). On-site review time was used to conduct interviews with those who oversee the daily practices of the MCO. This ensures that documentation is developed and practices occur within the scope of the contract and in a manner that meets or exceeds federal regulations.

A detailed protocol (BHC MCO Compliance Review Scoring Form) was utilized to ensure that all the elements of the federal regulations were addressed in the review process. Additionally, an interview tool was constructed to validate practices that occur at the MCO and to follow-up on questions raised from the document review and from the 2004 and 2005 External Quality Review. Document reviews occurred on-site to validate that practices and procedures were in place to guide organizational performance.

### Document Review

The following documents pertaining to Children's Mercy Family Health Partners were reviewed prior to and at the on-site visit:

The Division of Medical Services supplied:

- State of Missouri Contract Compliance Tool (including DMS responses and comments)

The following documents were requested for on-site review:

- Member Handbook
- Provider Handbook
- 2006 Marketing Materials
- Credentialing Policy and Annual Audit Reports
- Prior Authorization Time Frames and Policy
- Denial Logs
- Opt-Out Listings
- Policy Tracking Log

- Staff Training Records
- Grievance and Appeal Logs
- Grievances and Appeals related to members were reviewed, as were Complaints, Grievances, and Appeal files for providers. These files were obtained from a random selection process of actions filed in the first quarter of 2006.
- 2005 Annual Quality Improvement Program Evaluation

Additional documentation made available by Children's Mercy Family Health Partners included:

- 2006 Marketing Plan
- Children's Mercy Family Health Partners' Organizational Chart
- 2006 Welcome Calls summary by Quarter
- Connection – Member Newsletter
- Resource Paper: Kansas City Children's Asthma Management Program: KC CAMP Family Health Partners
- 2006 CMFHP Subcontractor Oversight Annual Evaluation Report (CommCare)

## Interviews

Interviews were conducted with the following group:

### Plan Administration

Robert Finuf – Chief Executive Officer, Plan Administrator

Ma'ata Touslee – Director of Health Services

Jenny Hainey – Manager, Quality Management

Kathy Ripley-Hake – Director, Provider Relations

Juanita Prieto – Manager, Provider Relations

Cindy Mense – Director, Customer Relations

Chris Beurman – Manager, Community Relations

Lisa Gabel – Manager, Clinical Services

Chad Moore – Compliance Officer

## Mental Health

Brian Baker – CommCare

Ma'ata Touslee – CMFHP

Jenny Hainey – CMFHP

Linda Steinke – CMFHP

Lisa Woodring – New Directions Behavioral Health

## FINDINGS

### Enrollee Rights and Protections

The staff at Children's Mercy Family Health Partners (CMFHP) continued to exhibit a strong commitment to ensuring that member rights were protected. The MCO utilized interpreter services, pre-translated written materials and a variety of methods for those members who spoke a language other than English. The MCO provided alternatives to members who may have reading, vision, or hearing problems that enabled them to obtain required information about the health plan or the services they can expect to receive. Member Services staff set up alternatives for individuals with any barrier to obtaining services and worked diligently to ensure that they received any necessary assistance.

During 2005, CMFHP developed a tracking system to guarantee that all required materials and policy are reviewed on an annual basis, as required, and are submitted to the SMA in a timely manner. This information continues to be reviewed on a monthly basis and is stored in a locally maintained Access database. A quality committee reviews the database information quarterly to ensure that all updates occurred timely. Member education and marketing materials were all submitted and approved early in 2006.

CMFHP worked with an external contractor to develop applications of the ManagedCare.com software for their health information system. The company, using an internal utilization management committee, initially looked at all parts of the CMFHP system and narrowed the initial focus to ten areas. The ManagedCare.com database was implemented and operational in 2006. The system produces monthly analysis, trends, and utilization information that is initially used by Utilization Management. Trend analysis is provided to managers on a monthly basis.

These reports have been an important tool for managers in relation to both member and provider services.

During 2005 the CMFHP Member Advisory Committee was established. During 2006 the MCO admits that they have struggled in maintaining regular attendance by members. They have provided transportation and other incentives with little success. Several ideas for membership based on information from other MC+ MCOs were provided and included foster parents and the use of a former member who may have more resources currently and be able to attend. The MCO exhibited its strong commitment to the advisory committee members and continues to send reminders. The MCO has added consumer advocates as committee members to enhance community generated information. Membership now includes school nurses, social workers, Head Start teachers, and Parents as Teachers advocates. Quarterly meetings of this group are continuing and attendance has improved significantly. Topics of these meetings included disease management programs and benefits. A speaker on domestic violence presented at one meeting. Information from the presentation was included in a member newsletter, at the recommendation of a committee member. The committee has made suggestions, such as changing marketing brochures, which have been implemented. Their advice and recommendations will be considered and utilized whenever possible.

During 2006, CMFHP continued attempts to inform, engage, and reach out to the Latino community by employing staff of Latino descent. The MCO Welcome Call was amended and now includes a Spanish version. All written information regularly used by members is now automatically produced in Spanish. In addition, a Spanish language component became part of the Nurse Advice Line to ensure immediate availability to Spanish speaking members. The actual Welcome Call vendor did change during 2006. The MCO experienced problems with answering phone calls and completing surveys. During this time the MCO also changed the survey tool and increased materials sent to members. Members indicated that they were not satisfied with customer services. They have responded positively to the change in vendors and have expressed appreciation that the MCO made a change to improve the information they receive and their access to care.

Children's Mercy Family Health Partners has participated in a number of community events including back-to-school fairs, work with area churches, the Chamber of Commerce, and events

targeting the Latino and African American communities. They have worked with two groups specifically, El Central and CoHo. A Latino staff member attends many of these events to ensure appropriate information is shared with members about access to care. The local Latino radio station interviews staff and uses this information to promote events for their listeners. The MCO reports that they formerly had very good attendance at information meetings with the Latino population. However, there is currently a fear of retaliation as the result of the press coverage regarding immigration issues, resulting in lower attendance at community educational activities. Many are fearful of attendance at public meetings. The MCO states that new members will not answer the question on the intake form about primary language spoken in the home, so it is becoming more difficult to ensure that members receive language support when it is needed.

The YMCA posts information that reaches a number of minority communities in the area. Free swimming is provided by Parks and Recreation and up to 500 individuals attended one event at Swope pool. The MCO provided healthy snacks, and information on available services and local providers. The Case Managers participate monthly in a “concerned clergy” radio program sponsored by the “Ministerial Alliance” of African American pastors. This has provided additional information on healthcare services to the community, as well as education to members on the availability of providers and supportive services.

The EQRO asked a follow-up question about the Asthma program that was initiated in 2004 and expanded in 2005. This program has won national awards and did continue throughout 2006. The MCO continues to experience positive outcomes from this program. The program began with the delivery of an education module to primary care physicians. It has evolved and now includes information on healthy lifestyles and an Anti-Obesity Program. The MCO started the program at the larger clinics and used the same model that was utilized by the Asthma Initiative. The technology has been expanded so more staff has access to member information and can provide additional supports from sources such as the Nurse Help Line. The Obesity Clinics are located at Children's Mercy Hospital, Northland Clinic, Swope Health Services and Parallel Parkway. The MCO is ready to start programs at the Cass County Pediatric Clinic, St. Luke's Hospital, Cabot Health Clinic, and Sam Rogers Health Center.

Ratings for Compliance with Enrollee Rights and Protections (100%) reflected policy and procedures that were submitted to and approved by the SMA. All written information has been submitted for approval. All practice observed, as well as additional documentation viewed while on-site, indicated that the MCO is fully compliant in this area.

**Table 80 – Subpart C: Enrollee Rights and Protections Yearly Comparison (CMFHP)**

<b>Federal Regulation</b>	<b>CMFHP</b>		
	<b>2004</b>	<b>2005</b>	<b>2006</b>
438.100(a) Enrollee Rights: General Rule	1	2	2
438.10(b) Enrollee Rights: Information Requirements	2	2	2
438.10(c)(3) Alternative Language: Prevalent Language	2	2	2
438.10(c)(4,5) Language and Format: Interpreter Services	2	2	2
438.10(d)(1)(i) Information Requirements: Format/Easily Understood	2	2	2
438.10(d)(1)(ii)and (2) Information Requirements: Format Visually Impaired, and Limited Reading Proficiency	2	2	2
438.10(f) Information for All Enrollees: Free Choice, etc.	2	2	2
438.10 (g) Information to Enrollees: Specifics/Physician Incentive Plans	2	2	2
438.10(i) Special Rules: Liability for Payment/Cost Sharing	2	2	2
438.100(b)(2)(iii) Enrollee Rights: Provider-Enrollee Communications	2	2	2
438.100(b)(2)(iv,v) Rights to Refuse Services/Advance Directives	1	2	2
438.100(b)(3) Right to Services	1	2	2
438.100(d) Compliance with Other Federal/State Laws	2	2	2
Number Met	10	13	13
Number Partially Met	3	0	0
Number Not Met	0	0	0
Rate Met	76.9%	100%	100%

Note: 0 = Not Met; 1= Partially Met; 2 = Met

Sources: Department of Health and Human Services Centers for Medicare & Medicaid Services (2003). Monitoring Medicaid Managed Care Organizations (MCOs) and Prepaid Inpatient Health Plans (PIHPs): A protocol for determining compliance with Medicaid Managed Care Proposed Regulations at 42 CFR Parts 400, 430, et al. Final Protocol Version 1.0.; BHC, Inc., 2004 External Quality Review Monitoring MCOs Protocols.

## Behavioral Health

CMFHP continued to work with CommCare for the provision of behavioral health services for members during 2006. The MCO is now contracting with New Directions Behavioral Health Services (NDBH). Interviews included both behavioral health providers. Questions were directed toward CommCare as they provided services throughout the review year. CommCare was questioned about their policy regarding transferring members receiving services from out-of-network providers as a follow-up to the 2005 review. The BHO stated that they did explore changing the policy. The decision was made to continue with a four-week window of continued services with the out-of-network provider. This would allow the provider to become a member of their network, or to transition the member to a new provider. The BHO recognized that this may restrict members in some situations, but reported that they had very few member complaints.

CommCare identified inpatient readmissions as an area that was problematic for the BHO. A key factor impacting readmissions, involved members who received inpatient treatment and had limited family support upon discharge. As a result, the BHO developed a system to provide in-home therapy and intensive case management for members at risk. A committee of staff from the BHO, MCO, and local psychiatric hospitals gathered data that indicated the combination of intensive case management, in-home therapy, and support in ensuring that individuals kept aftercare appointments did reduce the re-admission rate. The BHO contracted with three specific providers to perform the intensive case management component of this service system. The result of this improved approach has been an ongoing decline in hospital readmissions throughout 2006. HEDIS measures indicated an increase in follow-up after discharge and a corresponding decrease in readmission rates as well.

CommCare reports that they have had a positive impact on behavioral health providers maintaining coordination with primary care physicians. They utilize a postcard in every file that the behavioral health provider must use to inform the PCP of their involvement with the member. CommCare reports that they complete a 100% audit of records in the Community Mental Health Providers' offices every quarter. These records indicate that the PCPs are notified of the behavioral health provider's involvement.

CommCare reports that the transition at the end of 2006 to the subcontractor, NDBH, went smoothly. The BHO maintained strong and open communication between themselves, CMFHP and NDBH. Their provider network information was shared with NDBH. All but one of their current providers agreed to contract with the new BHO. A contact telephone number was transferred to NDBH so this change was transparent to members. A listing of members in active case management was provided to the new BHO, as well as clinical notes, to ensure continuity of care.

## **Quality Assessment and Performance Improvement**

### **Access Standards**

CMFHP continued to have a strong provider network through the MC+ Region. The MCO has worked one-on-one with providers, including specialists who agreed to become panel members. The MCO recognized a continued need for neurosurgeons and orthopedic surgeons. CMFHP recruited several specialists who agreed to be in the network, but requested to remain silent and not be published in the Provider Manual. These providers saw members when contacted directly by MCO staff. CMFHP paid a higher fee to OB, orthopedic surgeons, urologists, and neurologists outside of Truman Medical Center staff to ensure adequate access to these specialties. The MCO also engaged Truman Medical Center in this process, to ensure that members were triaged and received a referral and provider access quickly. CMFHP continued to monitor their PCP availability and continued recruitment to ensure that adequate open panels were available. The MCO reports that their open panel rate of providers has improved after the adult eligible population decreased with the State's eligibility changes. The access for adults and children has improved.

A high number of members requested a change in PCPs during 2005. The MCO began tracking members who requested changes in PCPs, pharmacy data, and emergency room utilization to identify if drug seeking was a contributor to this problem. The monitoring has produced some useful information. One member did require pharmacy "lock-in." Several members chronically missed appointments and were asked to find a new physician. The MCO is continuing to monitor this issue and address problems as they arise.

CMFHP worked with their subcontractor, Bridgeport Dental, to improve access to orthodontic services and regular dental services. This problem has decreased. A dental hygienist has been

### **Performance Management Solutions Group**

A division of Behavioral Health Concepts, Inc.



put in place by the Health Department in Henry County. This individual can complete screenings and do education with members. This is occurring at the health department and schools in the area.

The MCO continued to use member surveys and on-site reviews to monitor access standards. When deficiencies were identified they were dealt with in writing. Direct provider contact occurred where required. Re-audits occurred to ensure that improvement was sustained.

Ratings for compliance with Access Standards (100%) reflected completion of all required written policies and procedures. Observations and interviews that occurred during the on-site review provided additional evidence that MCO practices and operations appear to be compliant with the MC+ Managed Care Contract and federal regulations.

**Table 81 – Subpart D: Quality Assessment and Performance Improvement: Access Standards Yearly Comparison (CMFHP)**

Federal Regulation	CMFHP		
	2004	2005	2006
438.206(b)(1)(i-v) Availability of Services: Provider Network	2	2	2
438.206 (b) (2) Access to Well Woman Care: Direct Access	2	2	2
438.206(b)(3) Second Opinions	2	2	2
438.206(b)(4) Out of Network Services: Adequate and Timely Coverage	1	2	2
438.206(b)(5) Out of Network Services: Cost Sharing	2	2	2
438.206(c)(1)(i-vi) Timely Access	2	2	2
438.206(c)(2) Provider Services: Cultural Competency	2	2	2
438.208(b) Care Coordination: Primary Care	1	2	2
438.208(c)(1) Care Coordination: Identification	2	2	2
438.208(c)(2) Care Coordination: Assessment	2	2	2
438.208(c)(3) Care Coordination: Treatment Plans	2	2	2
438.208(c)(4) Care Coordination: Direct Access to Specialists	1	2	2
438.210(b) Authorization of Services	1	2	2
438.210(c) Notice of Adverse Action	2	2	2
438.210(d) Timeframes for Decisions, Expedited Authorizations	2	2	2
438.210(e) Compensation of Utilization Management Activities	2	2	2
438.114 Emergency and Post-Stabilization Services	1	2	2
Number Met	12	17	17
Number Partially Met	5	0	0
Number Not Met	0	0	0
Rate Met	70.6%	100%	100%

Note: 0 = Not Met; 1= Partially Met; 2 = Met

Sources: Department of Health and Human Services Centers for Medicare & Medicaid Services (2003). Monitoring Medicaid Managed Care Organizations (MCOs) and Prepaid Inpatient Health Plans (PIHPs): A protocol for determining compliance with Medicaid Managed Care Proposed Regulations at 42 CFR Parts 400, 430, et al. Final Protocol Version 1.0.; BHC, Inc., 2004 External Quality Review Monitoring MCOs Protocols.

### **Structures and Operation Standards**

CMFHP members have open access to specialists, with no referral from the PCP required. In some cases members receive assistance with referrals from MCO case managers. When a member had a specific problem, and care coordination was needed between clinicians, this was provided by the appropriate case manager. The MCO initiated a formal means of facilitating communication between PCPs and specialists. They report that letters detailing care provided flow between the two. Case managers facilitate this communication, with member approval, to ensure that pertinent information was shared.

CMFHP formed a committee during the past year to discuss the best methodology for making information about advance directives available to members. The goal was to have this information available at PCP offices. Education and materials were provided to PCPs on this topic. Two areas that remained problematic were accurate completion of all required documentation and proper recording in medical records. The MCO continued to work with PCP offices to improve these areas.

CMFHP credentialing policies were reviewed. NCQA standards are followed. Site visits and record keeping reviews are conducted on initial credential of PCPs and OB/GYNs. Re-credentialing is conducted every three years. Sanctions and quality are reviewed monthly. Credentialing policies and procedures were approved by the MCO oversight committee, and were approved by the SMA in June 2006. Information reviewed indicated that a delegated review of Truman Medical Center occurred and no deficiencies were identified. Bridgeport, the dental subcontractor, was the subject of a delegated audit in July 2005 and no deficiencies were found.

The MCO participated in an OB forum as planned in 2005 and 2006. They report having three or four successful meetings with good information sharing between case management staff and physicians attending. The Case Managers attend a forum in St. Louis annually. In 2006 the topic focused on domestic violence. This has been a helpful tool in expanding the knowledge reporting issues that confront members.

Pharmacy services were carved out of the responsibility for this provider in the most recent contract. The MCO reports to the SMA cases that require pharmacy lock-in. They also have access to “Cyber Pharmacy” to obtain information. This has also enabled them to lock members in if there is abuse of urgent care centers.

The ratings for compliance with Structure and Operation Standards (100%) reflected complete policy and procedural requirements. The MCO appears to be compliant with all policy and practice in this area that meets SMA contract compliance and federal regulations.



**Table 82 – Subpart D: Quality Assessment and Performance Improvement: Structure and Operation Standards Yearly Comparison (CMFHP)**

Federal Regulation	CMFHP		
	2004	2005	2006
438.214(a,b) Provider Selection: Credentialing/Recredentialing	1	2	2
438.214(c) and 438.12 Provider Selection: Nondiscrimination	2	2	2
438.214(d) Provider Selection: Excluded Providers	0	2	2
438.214(e) Provider Selection: State Requirements	1	2	2
438.226 and 438.56(b)(1-3) Disenrollment: Requirements and limitations	2	2	2
438.56(c) Disenrollment Requested by the Enrollee	2	2	2
438.56(d) Disenrollment: Procedures	2	2	2
438.56(e) Disenrollment: Timeframes	2	2	2
438.228 Grievance System	2	2	2
438.230(a,b) Subcontractual Relationships and Delegation	1	2	2
Number Met	6	10	10
Number Partially Met	3	0	0
Number Not Met	1	0	0
Rate Met	60%	100%	100%

Note: 0 = Not Met; 1= Partially Met; 2 = Met

Sources: Department of Health and Human Services Centers for Medicare & Medicaid Services (2003). Monitoring Medicaid Managed Care Organizations (MCOs) and Prepaid Inpatient Health Plans (PIHPs): A protocol for determining compliance with Medicaid Managed Care Proposed Regulations at 42 CFR Parts 400, 430, et al. Final Protocol Version 1.0.; BHC, Inc., 2004 External Quality Review Monitoring MCOs Protocols.

### **Measurement and Improvement**

CMFHP continued to be an active member of the Kansas City Quality Improvement Consortium (KCQIC) and utilized the practice guidelines developed and supported by that group. The local guidelines that were used by the MCO continued to meet or exceed nationally accepted standards. The KCQIC has developed guidelines on obesity treatment. CMFHP is now using these guidelines. The MCO continued to utilize Milliman and Roberson guidelines for utilization management.

CMFHP continues to send providers a quarterly report card covering lead and EPSDT rates. This is used as an incentive to increase the screening rates. Solo practice PCPs have the best rates in the MCO. They are reporting completion rates of 77%-84%. The MCO is discussing adding additional HEDIS components to the report card in the future.

The MCO initiated the FCMS project during 2006, referring to their Case Management System – NowCare. This is a computerized case management program that allows access to all staff needing pertinent information. Information can be accessed from any approved area within the organization. The system contains disease management information and essentially all medical record information including physician and well-child visits. Staff with system access, can locate members, identify if case management services are occurring, refer for case management, update contact information, and record information about member contacts, assessments, care plans, and follow-up services. This system is an enhancement that will improve quality, access, and timeliness of services for members.

CMFHP did submit two Performance Improvement Projects (PIPs) for validation. Specific details of these projects can be found in the appropriate section of the report. It was noted that the MCO utilized projects that had been started, and perfected these projects in an effort to create improved services to members during the measurement year. These PIPs were well-constructed and provided adequate information for validation.

The MCO submitted all required information to complete the Validation of Performance Measures, as requested. CMFHP continued to operate a health information system within the guidelines of that protocol. All encounter data requested was provided in the correct format. The details of each of these areas of validation can be reviewed within specific sections of this report.

Ratings for the Measurement and Improvement sections were found to be (100%), which reflects that all required policy and practice meets the requirements of the MC+ Medicaid Managed Care contract and the federal regulations.



**Table 83 – Subpart D: Quality Assessment and Performance Improvement: Measurement and Improvement Yearly Comparison (CMFHP)**

<b>Federal Regulation</b>	<b>CMFHP</b>		
	<b>2004</b>	<b>2005</b>	<b>2006</b>
438.236(b)(1-4) Practice Guidelines: Adoption	2	2	2
438.236(c) Practice Guidelines: Dissemination	2	2	2
438.236(d) Practice Guidelines: Application	2	2	2
438.240(a)(1) QAPI: General Rules	2	2	2
438.240(b)(1) and 438.240(d) QAPI: Basic Elements of MCO Quality Improvement and PIPs	1	2	2
438.240(b)(2)(c) and 438.204(c) QAPI: Performance Measurement	2	2	2
438.240(b)(3) QAPI: Basic Elements/Over and Under Utilization	2	2	2
438.240(b)(4) QAPI: Basic Elements regarding Special Healthcare Needs	2	2	2
438.240(e) QAPI: Program Review by State	NA	NA	NA
438.242(a) Health Information Systems	2	2	2
438.242(b)(1,2) Health Information Systems: Basic Elements	1	2	2
438.242(b)(3) Health Information Systems: Basic Elements	1	2	2
Number Met	8	11	11
Number Partially Met	3	0	0
Number Not Met	0	0	0
Rate Met	72.7%	100%	100%

Note: Regulation 438.240(e) refers to program review by the state. The regulation requires the state to review, at least annually, the impact and effectiveness of each MCO's quality assessment and performance improvement program. The regulation refers to the state QA & I program review process and is not applicable to External Quality Review of the MC+ Managed Care Program. This percent is calculated for the regulations that are applicable to the MC+ Managed Care Program.

0 = Not Met; 1 = Partially Met; 2 = Met

Sources: Department of Health and Human Services Centers for Medicare & Medicaid Services (2003). Monitoring Medicaid Managed Care Organizations (MCOs) and Prepaid Inpatient Health Plans (PIHPs): A protocol for determining compliance with Medicaid Managed Care Proposed Regulations at 42 CFR Parts 400, 430, et al. Final Protocol Version 1.0.; BHC, Inc., 2004 External Quality Review Monitoring MCOs Protocols.

### Grievance Systems

Ratings for compliance with the Grievance Systems regulations (100%) indicate that the MCO completed all requirements regarding policy and practice.

An update occurred in the MCO's claims system during 2006. This resulted in a decrease in provider complaints. There was an inappropriate edit in the system causing complaints that resulted in a number of overturned decisions. This edit was removed and replaced with an appropriate edit and complaints decreased significantly. Timeframes for authorizations were extended to 14 days, as needed to obtain additional information. This decreased denials and provider complaints as well. Currently the MCO has a very low denial rate.

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Five member grievances and one member appeal were reviewed. All five grievances pertained to transportation. In three cases the complaint was unsubstantiated as the driver had followed required procedures. In the remaining two the grievance was upheld and the driver received additional training. The appeal was upheld. All required timelines and documentation were complete and met.

Six complaint files were reviewed concerning provider issues. All member and provider files were in order and contained required and approved notification. All correspondence was sent within policy timeframes. Medical directors were appropriately involved to ensure that members obtained the healthcare they required.

**Table 84 – Subpart F: Grievance Systems Yearly Comparison (CMFHP)**

<b>Federal Regulation</b>	<b>MCP</b>		
	<b>2004</b>	<b>2005</b>	<b>2006</b>
438.402(a) Grievance and Appeals: General Requirements	2	2	2
438.402(b)(1) Grievance System: Filing Requirements - Authority	2	2	2
438.402(b)(2) Grievance System: Filing Requirements - Timing	2	2	2
438.402(b)(3) Grievance System: Filing Requirements - Procedures	2	2	2
438.404(a) Grievance System: Notice of Action - Language and Format	2	2	2
438.404(b) Notice of Action: Content	2	2	2
438.404(c) Notice of Action: Timing	2	2	2
438.406(a) Handling of Grievances and Appeals: General Requirements	2	2	2
438.406(b) Handling of Grievance and Appeals: Special Requirements for Appeals	2	2	2
438.408(a) Resolution and Notification: Basic Rule	2	2	2
438.408(b,c) Resolution and Notification: Grievances and Appeals - Timeframes and Extensions	2	2	2
438.408(d)(e) Resolution and Notification: Grievance and Appeals - Format and Content of Notice	2	2	2
438.408(f) Resolution and Notification: Grievances and Appeals - Requirements for State Fair Hearings	2	2	2
438.410 Expedited Resolution of Appeals	2	2	2
438.414 Information about the Grievance System to Providers and Subcontractors	2	2	2
438.416 Recordkeeping and Reporting Requirements	2	2	2
438.420 Continuation of Benefits while Appeal/Fair Hearing Pends	2	2	2
438.424 Effectuation of Reversed Appeal Resolutions	2	2	2
Number Met	18	18	18
Number Partially Met	0	0	0
Number Not Met	10	0	0
Rate Met	100%	100%	100%

Note: 0 = Not Met; 1= Partially Met; 2 = Met

Sources: Department of Health and Human Services Centers for Medicare & Medicaid Services (2003). Monitoring Medicaid Managed Care Organizations (MCOs) and Prepaid Inpatient Health Plans (PIHPs): A protocol for determining compliance with Medicaid Managed Care Proposed Regulations at 42 CFR Parts 400, 430, et al. Final Protocol Version 1.0.; BHC, Inc., 2004 External Quality Review Monitoring MCOs Protocols

## Conclusions

Children's Mercy Family Health Partners continues their strong commitment to meeting all policy, procedure, and practice areas of compliance with both the MC+ Medicaid Managed Care contract requirements and the federal regulations. The MCO exhibited a meticulous attention to meeting all the details of the regulations, submitting policy and procedural updates in a timely fashion, and utilizing the 2005 External Quality Review as a guideline for meeting required standards. The staff within CMFHP exhibited a commitment to excellence in serving MC+

Medicaid Managed Care members. They demonstrated respect and dignity toward members, while meeting their healthcare service needs efficiently and effectively. The MCO went beyond the strict requirements of their contract to ensure that members are able to have a voice in the design of their healthcare system. The system created at CMFHP is responsive and strives to assist its members in overcoming the barriers often encountered in the areas of quality, access and timeliness in obtaining healthcare services.

## QUALITY OF CARE

CMFHP has initiated a number of programs to ensure that members from the diverse population in their area have access to providers and information in their language and in a manner that is understandable to them. They work diligently to ensure that providers are serving members in a quality manner. The MCO monitors their service delivery system, including providers, regularly to produce quality services from the organization, and from the healthcare providers involved. CMFHP has demonstrated a number of creative approaches to engaging providers, particularly in hard-to-reach specializations. They actively engage new health management programs to benefit members. The MCO has a strong relationship within the community to obtain feedback on their programs to ensure that quality care and services are achieved.

## ACCESS TO CARE

Children's Mercy Family Health Partners demonstrates its commitment to ensuring access to care to members throughout their organization. Their focus on development and utilization of a Member Advisory Committee to ensure that members have a forum to discuss access issues directly with the MCO is a primary example. Their willingness to assist members' attendance, by creating reminders and providing transportation highlights this effort. The MCO demonstrates its sincerity in these efforts by implementing suggestions that come from these meetings. The MCO has also made many accommodations to ensure that members have access to the array of specialists they require to obtain quality healthcare services.

## TIMELINESS OF CARE

The MCO has ensured that the treatment of members and providers during the grievance and appeal process is of primary importance. They examine the reasons for grievances and appeals to ensure that their processes are not causing a problem. If this is the case, the MCO is willing to take steps to rectify the problem, thus ensuring that timely care takes place for members. CMFHP continues their vigilant attention to continuous improvement within the organization and attention to improving services to members.

## RECOMMENDATIONS

1. Continue to develop an organization that can exhibit energy and enthusiasm for its mission.
2. Continue to actively monitor providers and subcontractors and to develop corrective action initiatives when a problem is identified, such as advance directive utilization.
3. Continue to look for creative methods to use as motivators, such as available incentives, to encourage member utilization of MCO resources, particularly for high-risk populations.

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## 10.0 Blue Advantage Plus of Kansas City

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The previous sections of the 2006 EQRO report present the purpose and objectives, technical methods, procedures for evaluation, and MCO to MCO comparisons of analyses, findings, and recommendations for each of the protocols based on the aggregate analysis. This section of the EQRO report summarizes MC+ MCO specific methods, procedures, findings, and recommendations for improving the quality, timeliness, and access to care for MC+ Managed Care Members. Please refer to the main report for detailed technical objectives, methods, and presentation of data that are referenced here for the MC+ MCO.

## 10.1 Performance Improvement Projects

### METHODS

#### Document Review

Blue Advantage Plus supplied the following documentation for review:

- NCQA Quality Improvement Activity Form: Ambulatory Follow-Up after Hospitalization for Mental health Disorders for BA+ Members
- NCQA Quality Improvement Activity Form: Appeals Process Compliance Performance Improvement Project

#### Interviews

Interviews were conducted with the project leaders for each Performance Improvement Project (PIP) by the EQRO team on August 1, 2007 during the on-site review, and included the following:

Judy Brennan – Director State Programs BA+, Plan Administrator

Wes Wadman – Special Programs Coordinator

Tylisa Wyatt – Complaint Analyst

Cheryl Banks – Manager, Quality Performance Measurement

Lisa Woodring – Senior Director, Care Management

Shelly Bowen – Assistant Vice President Quality Management

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Interviewees shared information on the validation methods, study design, and findings. Technical assistance regarding study design and presentation of findings was provided by the EQRO. The following questions were addressed:

- What study questions were used?
- What instruments were used for data collection?
- How was the accuracy, consistency, and validity assured?
- What interview instruments were used?
- Why were the projects valid for continuation and used as PIPs for this project year?
- What findings were relevant to the MC+ population?
- How was improvement analyzed?
- What are the conclusions about the effectiveness of the interventions analyzed?

Several questions were presented during the on-site review and the MC+ MCO requested time to provide additional information. This information was received and considered in the final validation process.

## FINDINGS

The first PIP evaluated was Ambulatory Follow-Up after Hospitalization for Mental Health Disorders and was submitted as a clinical performance improvement project. This was a clinical project focused on improving the number of members who complied with the HEDIS measure requiring follow-up services within seven (7) and thirty (30) after hospitalization. The MC+MCO identified this as a problem based on the results of their HEDIS review of the previous years. Revised information provided the basis for making the choice to embark on this project. This decision was based on HEDIS/NCQA standards and the literature review supporting the importance of compliance with timely follow-up care in reducing the risk of readmission to inpatient mental health treatment services. All enrollees between the ages of six and 65 were included in this study. No members were excluded based on the need for special healthcare services.

The study question submitted was, "Will providing follow-up interventions to members who have an inpatient mental health hospital stay increase the rate of outpatient follow-up

appointments within seven (7) and thirty (30) days?” This was a well constructed study question and accurately reflected the intent of this study.

The study presented clearly defined indicators that were measurable and defined the numerators and denominators that would be used to calculate success. The indicators were directly based on the HEDIS methodology. Due to inconsistencies in obtaining HEDIS data from the Behavioral Health Organization, or subcontractor, providing these services, a “HEDIS like” measurement was developed to compare to the actual HEDIS statistics gathered. The HEDIS-like measure utilized the technical specifications of what and how to measure the follow-up rates. The data from this measure will be analyzed and compared to the actual certified HEDIS data when it becomes available on an annual basis.

These indicators were well-defined and included methods of measurement. Detailed demographic characteristics were presented in the narrative. It noted that no portion of the population was excluded from the study. The focus of this study includes MC+MCO members only.

The study used objective and clearly defined indicators. The description of the indicators included a baseline benchmark, a source of the benchmark, and specific long and short term goals for the planned interventions. Numerators and denominators were established to define the measurements and comparisons that would be used and calculated. The documentation included explained the need for and benefit of follow-up services. The indicators used measure the occurrence of timely adherence to aftercare plans.

The population included in the study are all members, ages 6 through 65 with a HEDIS qualifying diagnosis, discharged from inpatient psychiatric treatment during each study year. The MC+MCO used the HEDIS specifications in defining this population. No sampling was used to determine who would be included.

The data sources described were specific. The additional information received explained the methodology for data collection. The sources of data included claims and encounter data that are sampled on a yearly basis. Quarterly runs were also to occur and were updated in each consecutive quarter. The details of these sources were provided with adequate detail to

produce confidence in their reliability and validity. The methodology remained constant across all time periods studied. The data included information exclusive to MC+ MCO members.

The data collection and analysis plans included a detailed definition regarding how the HEDIS and HEDIS-Like methodologies were to be used for internal monitoring of the follow-up service compliance. This explanation includes a narrative explanation of the case management process to be employed improving this measure. An in-depth data analysis plan was detailed in the documentation including a plan for quantitative and qualitative analysis. This plan provided information on how results would be presented and compared.

The information provided did include data representing the baseline data, 1/1/05 through 12/31/05, for each intervention, and the results of one follow-up period, which was 1/1/06 through 12/31/06. Improvement was identified although the stated goals of the project and comparison benchmarks were not met throughout this period.

The interventions utilized and the barriers to success were documented in great detail. Interventions, barriers, and opportunities for improvement were included for both facility issues and member issues. A discussion of methods or plans to improve or enhance these interventions to obtain a more successful outcome was not included. The information included did provide confidence that this project could have substantive impact on members compliance with obtaining the follow-up care required after a hospitalization for mental health services.

The second PIP evaluated was “Appeals Process Compliance Performance Improvement Project.” This was a non-clinical project. The decision to choose this study topic was supported by information provided regarding the MC+MCO compliance with SMA contract requirements. The rationale presented was thorough and clearly based on the need to respond to member grievance and appeal requests in a timely fashion. The argument was presented that responding to grievance and appeals issues timely and efficiently decreased the delay in access to care. The need for improvement was explained in the narrative and was supported by review of MC+MCO prioritized performance expectations and the results of the actual performance in this area. The narrative information effectively made the argument that this non-clinical approach to a performance improvement project was focused on improving the key aspects of member services. The information supporting this PIP stated that “by improving the response

time of member grievances and appeals, and provider complaints, grievances, and appeals. It provides the opportunity for the members and providers to make timelier health care decisions.”

The study question for this project was, “Will reviewing and revising the workflow and processes of complaints management, and educating appropriate staff, improve the complaints response time to members and providers?” The study question is well constructed and conveys the intent of the project. The indicators were discussed in detail and were based on the factors that created compliance for closing member grievances and appeals, or provider complaints, grievances and appeals within the required timeframe as included in the SMA contract. The goal was to obtain 100% compliance for each of the six indicators included in this project. The indicators were constructed to measure timely resolution for each step in the grievance and appeal process. It did associate this goal with improved member outcomes. The population includes all members and providers who file grievances and appeals. No group of the member population is excluded.

The study design specified what data is to be collected and how this will occur. The MC+MCO will use information generated by their FACETS system. This system includes the utilization management aspect of the MC+MCO responsibilities. It also generates and tracks information to MC+MCO staff, including the required Notice of Action letters. This system provides quick access to member information. The information provided ensured that all data in this system was valid and reliable. The FACETS database created quarterly reports on the indicators, including dates, reason, and notice of action outcomes.

A baseline methodology was provided and included pertinent measures for each indicator. A detailed data analysis plan was part of this documentation. This plan explained all data to be extracted from FACETS, and how it would be entered into tables to document numerator and denominators. Statistical testing for each measurement period was described. The z test will be utilized in compiling the results from this project. The narrative included a description of the quantitative and qualitative analysis conducted as part of the study process.

Interventions described included:

- training for subcontractors, customer service staff, and state program staff;

- the development of desk references for procedures and requirements; and
- management training regarding the timeframes and requirements of the NOA letters.

A description of the barriers to success was provided. Causes and possible solutions were also described.

The findings for one year post baseline were included. A detailed analysis of the data was provided in the narrative. The analysis described the measures where the goals were met, and those that indicated improvement, but had not yet reached the desired outcome. This analysis provided a discussion about variables that intervened in reaching the desired goals.

Enhancements to improve these interventions were also described. The analysis did identify initial and repeat measurements, statistical significance, and internal and external validity.

This study has potential for producing credible findings. The four remeasurement cycles included in the information presented covered the first year post baseline in which these interventions were implemented. The information presented described the effectiveness of the intervention with regard to the actions completed through this period. The impact on members was not part of the conclusions about the success of the project. However, with the improvements that were identified to date, it can be inferred that member services have improved. This project is not complete, but does indicate significant potential for success. Sustained improvement could not yet be determined. The format used to document the study findings was greatly improved compared to the original submission. The narrative included detailed explanation about the process of developing the project and the activities that had occurred.

## CONCLUSIONS

### QUALITY OF CARE

These PIPs focused on creating quality and adequate services to members in both the clinical and non-clinical approach. A quality approach to assisting members, educating members and facilities, and improving internal processes were evident throughout the documentation provided for both PIPs. By including an active case management process to assist any member who had inpatient mental health treatment, the quality of life and approach to providing services

were an obvious component for the clinical PIP. Continued training and process improvement were evident throughout the non-clinical PIP. In both projects the MC+MCO sought to improve the quality of services, or the quality of internal work internal, which will result in improved member care.

### ACCESS TO CARE

Both Performance Improvement Projects submitted by the MC+MCO had a focus that addressed improved access to healthcare services. The first PIP, regarding improved compliance with obtaining mental health aftercare services, exhibited a clear understanding that access to these services was essential to assisting members in achieving positive mental health outcomes. Efforts were made to ensure that members had access to the type and amount of services required after their inpatient stay. By addressing both inpatient facility barriers, as well as member constraints, the MC+MCO made a concerted effort to improve access for members.

The non-clinical PIP, focused on improving response time in the grievance and appeal process, also included a focus on access to appropriate healthcare services. By ensuring that the MC+MCO system did not put up barriers to members getting the healthcare services needed, access is improved.

### TIMELINESS TO CARE

Both projects had a distinct focus on timely and adequate care. In the first PIP regarding follow-up care after inpatient mental health treatment, the MC+MCO sought to ensure that members obtained outpatient treatment within the seven and thirty day time frames required by NCQA standards. In the second PIP regarding improving the grievance and appeal process there was attention to timely processing and decision making to assure that the services needed by the member could be delivered in a timely fashion. The focuses of both projects were to ensure that the most timely care be available to members, and to ensure that internal processes or other barriers did not hinder this outcome.



## RECOMMENDATIONS

1. The narratives did not include discussion on how the PIP process can be enhanced to improve outcomes based on the barriers and opportunities recognized to create improved outcomes. Conclusions were drawn based on the data that was currently available. However, next steps were not articulated in the information available. The inclusion of this information would ensure that the plan for these ongoing PIPs was clarified.
2. Continue using the expanded written format, used in the additional information submitted, in the information provided after the on-site review to communicate the intentions, planning, and processes utilized in developing and implementing the PIPs.
3. Utilize the Conducting Performance Improvement Project protocol to assist in the process of project development and reporting.

## 10.2 Validation of Performance Measures

### METHODS

This section describes the documents, data, and persons interviewed for the Validation of Performance Measures for Blue-Advantage Plus of Kansas City. Blue-Advantage Plus of Kansas City submitted the requested documents on January 3, 2007. The EQRO reviewed documentation between January 3, 2007 and May 1, 2007. On-site review time was used to conduct follow-up questions and provide feedback and recommendations regarding the performance measure rate calculation.

### Document Review

The following are the documents reviewed by the EQRO:

- The Baseline Assessment Tool (BAT) submitted by Blue-Advantage Plus of Kansas City
- Information Systems Capabilities Assessment (ISCA) submitted by Blue-Advantage Plus of Kansas City
- Ernst & Young's NCQA HEDIS 2006 Compliance Audit Report
- Letters of communication between the EQRO and Blue-Advantage Plus of Kansas City
- Blue-Advantage Plus of Kansas City policies pertaining to HEDIS 2006 rate calculation and reporting
- Blue-Advantage Plus of Kansas City Information Services (IS) policies on disaster recovery
- Blue-Advantage Plus of Kansas City's HEDIS implementation work plan and HEDIS committee agendas for 2005
- Data warehouse validation procedures for the CRMS software
- DB2 data warehouse models of the interim data warehouse

The following are the data files submitted for review by the EQRO:

- fuh7\_numerator.txt
- fuh30\_numerator.txt
- fuh\_denominator.txt
- fuh\_enrollment.txt
- PPC\_numerator.txt
- PPC\_enrollment.txt
- PPC\_postpartum\_numerator\_table.txt
- PPC\_prenatal\_numerator\_data.txt
- W34\_numerator.txt
- W34\_denominator.txt
- W34\_enrollment.txt

The Information Systems Capabilities Assessment (ISCA) review was conducted by the EQRO according to Appendix Z of the Validating Performance Measures protocol. The EQRO Project Director and Research Analyst reviewed all ISCA information provided by the plan. Follow-up reviews were conducted with Blue-Advantage Plus of Kansas City staff during on site reviews. The review of BA+ focused on BA+'s ability to accurately report Medicaid data as required by State and Federal regulation. To fulfill it's obligations as a Medicaid contractor, BA+ must demonstrate that it has the automated systems, management practices, data control procedures and rate calculation procedures required in place to assure that the data is adequately captured, stored, translated, analyzed, and reported.

The EQRO found that Blue-Advantage Plus of Kansas City's Information Systems (IS): 1) contained complete and accurate encounter data, as specifically detailed in BA+'s Validation of Encounter Data section (Section 10.3) of this report; 2) correctly calculated the performance measures reviewed, as specifically detailed below in this Validation of Performance Measure section of the report; 3) contributed to BA+'s ability to conduct quality assessment and improvement initiatives, as specifically detailed in BA+'s Compliance with Managed Care Regulations section of this report (Section 10.4); and 4) allowed BA+ to oversee and manage the delivery of health care to its enrollees, as specifically detailed below in the Conclusions subsection of this section (Section 10.2) of the report.

## Interviews

The EQRO conducted on-site interviews with Michelle Williams, Project Lead; Cheryl Banks, Manager Quality Performance Measurement; and Darren Taylor, Vice President Enterprise Information and Access at Blue-Advantage Plus of Kansas City in Kansas City on Wednesday, August 1, 2007. This group was responsible for calculating the HEDIS performance measures. The objective of the visit was to verify the data, methods, and processes behind the calculation of the three HEDIS 2006 performance measures. This included both manual and automatic processes of information collection, storing, analyzing, and reporting.

## FINDINGS

Blue-Advantage Plus of Kansas City used the Administrative Method for calculation of the HEDIS 2006 Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life, Follow-Up After Hospitalization for Mental Illness, and Prenatal and Postpartum Care. MCO to MCO

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comparisons of the rates of Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life, Follow-Up After Hospitalization for Mental Illness, and Prenatal and Postpartum Care were conducted using two-tailed z-tests. For comparisons that were statistically significant at the 95% confidence interval (CI), the z-score (z), the upper and lower confidence intervals (CI), and the significance levels ( $p < .05$ ) are reported.

The reported rate for Blue-Advantage Plus of Kansas City for the HEDIS 2006 Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life measure was 55.70%, comparable to the statewide rate for MC+ MCOs (58.23%;  $z = -.50$ , 95% CI: 52.67%, 64.88; n.s.). The reported rate for Blue-Advantage Plus of Kansas City for the HEDIS 2006 Follow-Up After Hospitalization for Mental Illness measure was 50.17% for the 7-day rate, significantly higher than the statewide rate for all MC+ MCOs (31.16%;  $z = -.18$ , 95% CI: 16.56%, 37.57%; n.s.); the reported rate was 72.76% for the 30-day rate, significantly higher than the statewide rate for all MC+ MCOs (52.92%;  $z = -.43$ , 95% CI: 39.53%, 59.95%; n.s.). The reported rate for Blue-Advantage Plus of Kansas City for the 2006 HEDIS Prenatal and Postpartum Care (Prenatal Visits rate) was 39.96%, significantly lower than the statewide rate for MC+ MCOs (53.30%,  $z = -.57$ ; 95% CI: 36.80%, 67.63%;  $p < .05$ ). The reported rate for Postpartum Visits was 56.05%, consistent with the rate for all MC+ MCOs (44.54%;  $z = -.98$ ; 95% CI: 28.37%, 59.20%;  $p < .05$ ).

The following sections summarize the findings of the process for validating each of the performance measures in accordance with the Validating Performance Measures Protocol. The findings from all review activities are presented according to the EQRO validation activity, with the findings for each measure discussed within the activities as appropriate. Please refer to the tables in the main report for activities, ratings, and comments related to the [CMS Protocol](#) [Validating Performance Measures Attachments](#).

## Data Integration and Control

Blue-Advantage Plus of Kansas City used a NCQA-certified vendor application from McKesson, Inc. for calculation of rates for the HEDIS 2006 measures. The EQRO was provided with a process overview of the FACETS claims management system and a validation overview of the CareEnhance Resource Management System (CRMS) data warehouse. The EQRO was given a demonstration of the data flow and integration mechanisms for external databases for these measures, and provided with a layout of the data structure of the internally-developed data

warehouse for storing interim data. For the three measures calculated, Blue-Advantage Plus of Kansas City was found to meet all criteria for producing complete and accurate data (see CMS Protocol Validating Performance Measures Attachment V: Data Integration and Control Findings). There were no biases or errors found in the manner in which Blue-Advantage Plus of Kansas City transferred data into the repository used for calculating the HEDIS 2006 measures of Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life, Follow-Up After Hospitalization for Mental Illness, and Prenatal and Postpartum Care.

### **Documentation of Data and Processes**

Data and processes used for the calculation of measures were adequate (see CMS Protocol Validating Performance Measures Attachment VII: Data and Processes Used to Calculate and Report Performance Measures). Blue-Advantage Plus of Kansas City met all criteria that applied for the three measures validated. Blue-Advantage Plus of Kansas City did utilize statistical testing, BA+ is partnering with Ernst & Young to best assess how to utilize the information that they obtain from the statistical analysis process.

### **Processes Used to Produce Denominators**

Blue-Advantage Plus of Kansas City met all criteria for the processes employed to produce the denominators of the performance measures validated (see CMS Protocol Validating Performance Measures Attachment X: Denominator Validation Findings). This involves the selection of eligible members for the services being measured. Denominators in the final data files were consistent with those reported on the DST for the three measures validated. All members were unique and the dates of birth ranges were valid. A total of 4,264 members eligible were reported and 4,264 were validated for the Well-Child Visits measure.

There were 301 eligible members reported for the denominator of the Follow-Up After Hospitalization measure, 301 were validated. There were 1,404 eligible members reported and validated for the denominator of the Prenatal and Postpartum Care measure.

### **Processes Used to Produce Numerators**

The measures validated included the appropriate data ranges for the qualifying events (e.g., well-child visits, follow-up visits and prenatal/postpartum visits) as specified by the HEDIS 2006

criteria (see CMS Protocol Validating Performance Measures XIII: Numerator Validation Findings).

There were a total of 2,375 administrative hits reported and validated for the HEDIS 2006 Well-Child Visit measures. The dates of service and medical event codes (CPT and ICD-9 CM) were all within the valid ranges. The rate validated by the EQRO for Well-Child was 55.70%, with no observed bias.

For the HEDIS 2006 Follow-Up After Hospitalization measure, the rate is reported for follow up after 7 days and follow up after 30 days. For the FUH (7 days), a total of 151 administrative hits were reported and 127 were validated by the EQRO. The rate reported by the MCO was 50.17%; the final rate calculated by the EQRO was 42.19%, with an observed bias of 7.97%. For the FUH (30 days), a total of 219 administrative hits were reported and 205 validated by the EQRO. The rate reported by the MCO was 72.76%; the final rate calculated by the EQRO was 68.11%, with a 4.65% observed bias.

There were a total of 561 administrative hits reported and validated for the HEDIS 2006 Timeliness of Prenatal Care measure; and a total of 787 administrative hits reported and validated for the Postpartum Care measure. The dates of service were all within the valid range. The rate reported by the MCO for Prenatal Care was 39.96%; the rate calculated by the EQRO was 39.96%, with no observed bias. The rate reported by the MCO for Postpartum Care was 56.05%; the rate calculated by the EQRO was 56.05%, with no observed bias.

### **Sampling Procedures for Hybrid Methods**

No sampling or medical record reviews were conducted or validated for the performance measures validated. CMS Protocol Validating Performance Measures Attachment XII; Impact of Medical Record Review Findings and CMS Protocol Validating Performance Measures Attachment XV: Sampling Validation Findings do not apply to the Administrative Method.

### **Submission of Measures to the State**

Blue-Advantage Plus of Kansas City submitted the DST for all three measures validated to the SPHA (the Missouri Department of Health and Senior Services: DHSS) in accordance with the

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Code of State Regulations (19 CSR §10-5.010 Monitoring Health Maintenance Organizations) and the SMA Quality Improvement Strategy.

## Determination of Validation Findings and Calculation of Bias

As noted earlier, there was no bias found in the reporting of numerators, denominators, or rates of the Well-Child Visits and Prenatal and Postpartum Care performance measures validated. The Follow-Up After Hospitalization (7days) measure was overestimated, but was within the 95% confidence interval for the rates reported by the MCO. The Follow-Up After Hospitalization (30 days) measure was overestimated, but was within the 95% confidence interval for the rates reported by the MCO.

**Table 85 - Estimate of Bias in Reporting of HEDIS 2005 Measures**

Measure	Estimate of Bias	Direction of Estimate
Well-Child Visits in Third, Fourth, Fifth and Sixth Years of Life	None	
Follow- Up After Hospitalization (7 days)	7.97%	Overestimate
Follow-Up After Hospitalization (30 days)	4.65%	Overestimate
Prenatal and Postpartum Care (Prenatal)	None	
Prenatal and Postpartum Care (Postpartum)	None	

## Final Audit Rating

The Final Audit Rating for each of the performance measures was based on the findings from all data sources that were summarized in the Final Performance Measure Validation Worksheet for each measure.

**Table 86 - Final Audit Validation Rating for Performance Measures**

Measure	Final Audit Rating
Well-Child Visits in Third, Fourth, Fifth and Sixth Years of Life	Fully Compliant
Follow- Up After Hospitalization (7 days)	Substantially Compliant
Follow-Up After Hospitalization (30 days)	Substantially Compliant
Prenatal and Postpartum Care (Prenatal)	Fully Compliant
Prenatal and Postpartum Care (Postpartum)	Fully Compliant

Note: Fully Compliant = Measure was fully compliant with State specifications; Substantially Compliant = Measure was substantially compliant with State specifications and had only minor deviations that did not significantly bias the reported rate; A significant bias in the rate was defined as a number calculated by the EQRO that fell outside the 95% confidence interval of the rate reported by the MCO. Not Valid = Measure deviated from State specifications such that the reported rate was significantly biased. This designation is also assigned to measures for which no rate was reported; Not Applicable = No MC+ Members qualified for the measure.

## CONCLUSIONS

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Five rates were validated for the MCO. Two of these rates were consistent with; two and significantly higher than; and one was significantly lower than the average for all MC+ MCOs.

### QUALITY OF CARE

Blue Advantage Plus of Kansas City's calculation of the HEDIS 2006 Follow-Up After Hospitalization for Mental Illness measure was substantially compliant with specifications. This measure is categorized as an Effectiveness of Care measure and is designed to measure the effectiveness/quality of care delivered. The MCO's 7-day and 30- day follow-up reported rates were significantly higher than the average for all MC+ MCOs. Thereby, Blue-Advantage Plus of Kansas City's members are receiving a quality of care for this measure at a level greater than the care delivered to the average MC+ member. Additionally, both of these rates were higher than the National Medicaid Average, the MCO is delivering a level of care higher than that received by the average Medicaid member across the nation. The 7-day follow up rate is also higher than the National Commercial Average.

The EQRO was able to validate this rate within the reported 95% confidence intervals and thereby has substantial confidence in the calculated rate.

### ACCESS TO CARE

The MCO's calculation of the HEDIS 2006 Prenatal and Postpartum Care measure was fully compliant. This measure is categorized as an Access/Availability of Care measure and is designed to measure access to the care defined. The MCO's reported rate for the Prenatal Care section of this measure was significantly lower than the average all MC+ MCOs. Thereby, Blue Advantage Plus' members are receiving the less access to care for this measure than the average MC+ members. The MCO's reported rate for the Postpartum section of this measure was consistent with the average for all MC+ MCOs.

The EQRO was able to fully validate the rate reported by the MCO for this measure and therefore is extremely confident in the MCO's reported rate.

### TIMELINESS OF CARE

The MCO's calculation of the HEDIS 2006 Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life measure was fully compliant. This measure is categorized as an Use of Services measure and is designed to measure the timeliness of care received. The MCO's reported rate

for this measure consistent with the average for all MC+ MCOs. Thereby, Blue Advantage Plus' members are receiving the timeliness of care for this measure at the same level as all other MC+ members.

The EQRO was able to fully validate the rate reported by the MCO for this measure and therefore is extremely confident in the MCO's reported rate.

## RECOMMENDATIONS

1. Blue-Advantage Plus of Kansas City should utilize hybrid methods where HEDIS specifications recommend using the hybrid approach.
2. Continue work with Ernst & Young to conduct and document statistical comparisons on rates from year to year.

## 10.3 Validation of Encounter Data

### FINDINGS

The findings for the encounter data validation are organized according to the encounter data evaluation questions presented in the Technical Methods section for the encounter data validation in the aggregate report. Please refer to the main report for detailed objectives, technical methods and procedures for encounter data validation.

#### **What is the Baseline Level of Completeness, Accuracy, and Reasonableness of the Critical Fields?**

For the Medical claim type, there were 77,673 encounter claims paid by the SMA for the period July 1, 2006 through September 30, 2006.

The Outpatient Claim Type field was 100.00% complete, accurate and valid.

The Outpatient Recipient ID field was 100.00% complete, accurate and valid.

The Outpatient First Date of Service field was 100.00% complete, accurate and valid.

The Outpatient Last Date of Service field was 100.00% complete, accurate and valid.

The Outpatient Units of Service field was 100.00% complete, accurate and valid.

The Outpatient Procedure Code field 100.00% complete, accurate and valid.

The Outpatient Place of Service field was 100.00% complete, accurate and valid.

The first Diagnosis Code field was 100.00% complete, accurate and valid.

The second through fifth Diagnosis Code fields are optional according to the Health Plan Record Layout Manual. Each of these Diagnosis Code fields fell well below the 100% threshold established by the SMA for this validation. The second, third, fourth and fifth Diagnosis Code fields were 47.81%, 21.23%, 10.64%, and 0.00% complete, accurate and valid, respectively. The remaining fields were blank (incomplete, inaccurate, and invalid).

For the Dental claim type, there were 10,177 encounter claims paid by the SMA for the period July 1, 2006 through September 30, 2006. All of the fields examined were 100.00% complete, accurate and valid, except for the fifth Diagnosis Code field, which was 0.00% complete, accurate and valid.

For the Home Health claim type, there were 464 encounter claims paid by the SMA for the period July 1, 2006 through September 30, 2006. All of the fields examined were 100.00% complete, accurate and valid except the Procedure Code and second through fifth Diagnosis

Code fields. The Procedure Code field was 71.12% complete and accurate and valid. The remaining fields ( $n = 134$ ) were blank. The second, third, and fourth Diagnosis Code fields were 29.31%, 16.59%, 11.42% and 2.80% complete, accurate, and valid, respectively. All remaining fields were blank (incomplete, inaccurate, and invalid).

For the Inpatient claim type, there were 1,638 encounter claims paid by the SMA for the period July 1, 2006 through September 30, 2006.

1. The Inpatient Claim Type field was 100.00% complete, accurate and valid.
2. The Recipient ID field was 100.00% complete, accurate and valid.
3. The Admission Type field was 100.00% complete, accurate and valid.
4. The Admission Date field was 100.00% complete, accurate and valid.
5. The Discharge Date field was 100.00% complete and 99.57% accurate and valid (with 7 entries of "99999999").
6. The Bill Type field was 100.00% complete, accurate and valid.
7. The Patient Status field was 100.00% complete, accurate and valid.
8. The first Diagnosis Code field was 100.00% complete, accurate and valid.
9. The second, third, fourth, and fifth Diagnosis Code fields fell well below the 100% threshold for completeness, accuracy, and validity established by the SMA (84.19%, 66.48%, 48.53%, and 36.14%, respectively). The remaining fields were blank (incomplete, inaccurate, and invalid).
10. The First Date of Service field was 100.00% complete, accurate and valid.
11. The Last Date of Service field was 100.00% complete, accurate and valid.
12. The Revenue Code field was 99.76% complete, accurate and valid. There were four (4) blank fields.
13. The Units of Service field was 100.00% complete, accurate and valid.

For the Outpatient Hospital claim type, there were 29,574 encounter claims paid by the SMA for the period July 1, 2006 through September 30, 2006. All fields examined were 100.00% complete, accurate, and valid except for the Procedure Code and second through fifth Diagnosis Code fields. The Procedure Code fields were 96.15% complete, accurate and valid. The remaining fields were blank ( $n = 1140$ ). The second, third, fourth and fifth Diagnosis Code fields fell well below the 100% threshold for completeness, accuracy, and validity established by the SMA (55.27%, 28.82%, 15.41% and 9.64%, respectively). The remaining fields were blank (incomplete, inaccurate, and invalid).

For the Pharmacy claim type, there were 37,479 claims paid by the SMA for the period July 1, 2006 through September 30, 2006. All fields examined were 100.00% complete, accurate and valid.

### **What Types of Encounter Claim Data are Missing and Why?**

Based on the above analysis of the accuracy, completeness, and validity of the data in the SMA encounter claims extract file for Blue-Advantage Plus of Kansas City, an error analysis of the invalid entries was conducted for fields which were lower than the 100.00% threshold specified by the SMA. Dental, Outpatient Medical, and Pharmacy claim type critical fields examined were 100.00% complete, accurate, and valid. For Home Health claims, the Procedure Code field contained some invalid data. The Discharge Date fields for the Inpatient claim type contained some invalid codes.

### **What is the Level of Volume and Consistency of Services?**

When comparing the rate of encounter claim types per 1,000 members, Blue-Advantage Plus of Kansas City demonstrated rates consistent with the average for all MC+ MCOs for the Outpatient Hospital, Pharmacy and Dental claim types; and a significantly higher rate for Home Health encounter claims. There was a significantly lower rate of Inpatient claim types for Blue-Advantage Plus of Kansas City than the average for all MC+ MCOs. These findings suggest moderate to high access to care for Outpatient Hospital, Pharmacy, Dental and Home Health Care services and lower access to Inpatient services for Blue-Advantage Plus of Kansas City members. Another explanation might be that since preventative care appears to be readily available, BA+ members are healthier and do not require as many acute services.

To examine the degree of match between the SMA encounter claims database and the medical record, 100 encounters from each MC+ MCO were randomly selected from all claim types for the period July 1, 2006 through September 30, 2006 for medical record review.

Of the 157,005 encounter claim types in the SMA extract file for July 1, 2006 through September 30, 2006, 100 encounters were randomly selected. Providers were requested to submit medical records for review. There were 100 medical records (100.0%) submitted for review. Encounters for which no documentation was submitted were unable to be validated. The match rate for procedures was 77.33%, with a fault rate of 22.77%. The match rate for

diagnoses was 73.33%, with a fault rate of 236.67%. The match rate for name of drug dispensed was 72.0%, with a fault rate of 28.0%. The match rate for quantity of drug dispensed was 44.0%, with a fault rate of 56.0%.

### **What Types of Errors were Noted?**

An error analysis of the errors found on the medical record review for procedure, diagnosis, name of drug dispensed, and quantity of drug dispensed was conducted. For the diagnosis code in the medical record, the reasons for diagnosis codes not matching the SMA extract file were missing information (n = 19) and incorrect code found (n=2). For the procedure code in the medical record, the reasons for procedure codes in the SMA extract file not being supported by documentation in the medical record were missing information (n = 14), incorrect code (n=2) and upcoded (1). Examples of missing information included no code; codes listed that were not supported, or codes that did not match the procedure description.

For the name of drug dispensed in the medical record, the reasons for drug names or NDC in the SMA extract file not being supported by documentation in the medical record were missing information (n = 7). No drug name or NDC was found in the records received by the EQRO.

For the quantity of drug dispensed in the medical record, the reasons for quantity of drug in the SMA extract file not being supported by documentation in the medical record were missing information (n = 14). No quantity was found in the records received for review by the EQRO.

### **To what extent do the MC+ MCO paid/unpaid encounter claims match the SMA paid database?**

Since Blue Advantage Plus of Kansas City included internal control numbers that matched those of the SMA, the EQRO conducted the planned analyses comparing MC+ MCO encounter data to the SMA encounter claim extract file. The SMA defined “unpaid claims” as those claims that the MCO denied for payment, unpaid claims do not include claims paid via a capitation plan.

For the Pharmacy Claim type, all encounter data submitted to the EQRO (n = 37,479) was of “paid” status. There were 0 unmatched claims that were in the BA+ encounter file and absent from the SMA data. Thus, 100.00% of the EQRO submitted encounters matched with the SMA encounter records.

For all Outpatient Claim Types (Medical, Dental, and Hospital), BA+ 117,888 “paid” encounters 144 “denied” and 66 “unpaid” claims were submitted. All paid encounter claims matched with the SMA encounter claim extract file. The 144 denied claims and 66 unpaid claims were not present in the SMA database (as expected); there was a “hit” rate of 99.82% between BA+ encounter claims and the SMA encounter data.

For the Inpatient Claim Type, BA+ submitted 1,638 encounter claims of “paid” status and 7 “denied” claims. All paid encounter claims matched with the SMA encounter claim extract file. The denied claims were not present in the SMA database.

### **Why are there unmatched claims between the MC+ MCO and SMA data files?**

The unmatched encounters are due to missing ICN numbers which are required to match the encounter to that of the SMA. Therefore, in all claim types, the encounter claims were legitimately missing from the SMA extract data.

### **What are the Data Quality Issues Associated with the Processing of Encounter Data?**

While the MC+ MCO did submit the data in the requested format (including most ICN numbers), there are a number of ways to improve the data quality by improving the database system. As the Internal Control Number is only assigned by the State database when a claim is paid, it is difficult to match the MC+ MCO data of “unpaid” and “denied” claims to the SMA data. As the Internal Control Number is unique only to the encounter, the ICN may be represented in multiple lines of data. To match the MC+ MCO data to the SMA data to specific fields, this requires a unique line number. Therefore each service provided within an encounter would have a separate line of data with a unique line identifier.

### **STRENGTHS**

1. Encounter data was submitted to the EQRO in the requested format which allowed encounter validation for all claim types.
2. The critical field validation of all six claim types resulted in few fields under the SMA established threshold of 100.00% accuracy, completeness, and validity.

3. The critical fields evaluated for the Dental, Outpatient Medical and Pharmacy claim types were 100.00% complete, accurate, and valid.
4. The rate of Home Health encounter claims was significantly higher than the average for all MC+ MCOs.

## AREAS FOR IMPROVEMENT

1. For the Home Health claim type, the Procedure Code fields contained invalid entries.
2. For the Inpatient claim type, there were invalid dates in the Discharge Date fields; also there were four blank Revenue Code fields.
3. The Outpatient Procedure Code field in the Hospital claim type contained invalid fields.
4. The rate of Inpatient encounter claims was significantly lower than the average for all MC+ MCOs.

## RECOMMENDATIONS

1. Examine and revise as needed internal system edits for invalid procedure codes in the UB-92 file layout for the Outpatient Procedure Code and Discharge Date fields, and run validity checks after the programming of new edits.

## 10.4 MCO Compliance with Managed Care Regulations

### METHODS

Prior to the site visit, documentation was received and reviewed regarding the MCO's compliance with the State contract. The External Quality Review Organization (EQRO) reviewed contract requirements with the staff of the Division of Medical Services (DMS). On-site review time was used to conduct interviews with those who oversee the daily practices of the MCO. This ensures that documentation is developed and practices occur within the scope of the contract and in a manner that meets or exceeds federal regulations.

A detailed protocol (BHC MCO Compliance Review Scoring Form) was utilized to ensure that all the elements of the federal regulations were addressed in the review process. Additionally, an interview tool was constructed to validate practices that occur at the MCO and to follow-up on questions raised from the document review and from the 2004 and 2005 External Quality Review. Document reviews occurred on-site to validate that practices and procedures were in place to guide organizational performance.

### Document Review

The Division of Medical Services supplied:

- State of Missouri Contract Compliance Tool (including DMS responses and comments)

The following documents were requested for on-site review:

- Member Handbook
- Provider Handbook
- Staff Training Information – Particularly on Grievances/Appeals
- Credentialing Policies and Audit Reports
- Prior Authorization Time Frames/Policy/Processes
- Denial Logs
- Out-Out Logs
- Policy Tracking Log
- Staff Training Logs

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- Grievance Logs for Member and Providers
- Grievances and Appeals related to members were reviewed, as were Complaints, Grievances, and Appeal files for providers. These files were obtained from a random selection process of actions filed in the first quarter of 2005.
- 2005 Annual Appraisal of the Quality Improvement Program

Additional documentation made available by Blue Advantage Plus included:

- 2005 and 2006 Marketing Plan and Educational Material Development Policy
- Blue Advantage Plus of Kansas City Organizational Chart
- BA+ Brochures – English/Spanish versions
- Complete Policy and Procedure Manuals
- 2006 Well Aware Newsletters (Member)
- 2006 Blue Speak Newsletters (Provider)
- Blue Advantage Plus – Scripting Matrix
- 2006 BA+ Policy Spreadsheet
- BA+ Report Care - 2006

## Interviews

Interviews were conducted with the following group:

### Plan Administration

Judy Brennan, Director, State Programs, Plan Administrator

Dr. Loretta Britton, VP, Medical Director

Sandy Wederquist, RN, Director, Medical Management

Shelly Bowen, AVP, Quality Management

Tylisa Wyatt, Complaint Analyst

Cheryl Banks, Manager, Quality Performance Measurement

Kath James, Manager, Credentialing and Accreditation

Wes Wadman, MHIP Coordinator

Wayne Burge, Vice President, Provider Contracting and Reimbursement

Dennis Radio, Director, Professional Services

Randy Meyer, Director, Hospital Services

Derrick Swetlishoff, Manager Network Development

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## Mental Health

Myron Unruh, AVP Clinical Operations

Garth Smith, Director, Network Operations

Lisa Woodring, Director, Prevention and Support Services

Judy Brennan, Director, State Programs

## FINDINGS

### ***Enrollee Rights and Protections***

Blue Advantage Plus continued to exhibit commitment and enthusiasm toward ensuring that member rights and protections are in place. Members were contacted quickly after the MCO learned of enrollment. A variety of continued contacts were made if initial attempts failed. Written information was provided in English or Spanish. If additional interpretive services were required, this was arranged for the member.

Blue Advantage Plus made changes in a number of processes to make service delivery easier for members. In January 2005 the MCO stopped requiring a primary care physician (PCP) referral for specialist care. Currently, this process continues. Communication is requested between physicians, with the goal of contact occurring between specialists and PCPs, within one day. If the situation is an emergency the Medical Director, Dr. Loretta Britton, is involved. Dr. Britton also is involved if a timely appointment cannot be made. Quality improvement staff monitors appointment access regularly to insure that this important component meets all requirements.

A complex case management program has been added to the already available catastrophic case management program. Nurses will now get regular reports from the emergency rooms and from hospitals. Nurses review all emergency room visits within one week. If a visit is not urgent, contact is made with the member to educate them on obtaining PCP care regularly and to provide assistance in overcoming barriers to the member utilizing PCP services. These case managers also review claims histories to assess where healthcare is received. Outreach to PCPs requesting their contact with members to engage them in utilizing their medical home is also

made. BA+ is working with American Academy of Family Practice (AAFP) to support members in maintaining a medical home.

BA+ operates the Care Connection program, which is an umbrella for healthy living initiative that includes prevention, disease management, and a relationship with a nurse case manager. This information and process is available to all BA+ members. The case manager schedules calls at the member's convenience. Outreach additionally occurs when a problem arises, such as a negative laboratory report. The program includes an interface with local public health departments and a monitoring program for diabetics and members with hypertension. The system is also shared with New Directions Behavioral Health the MCO behavioral health subcontractor. Feedback is provided regarding the medical perspective on consultations for members with multiple problems. This process also ensures timely access to follow-up care when referrals are made.

BA+ now has access to more information through their data warehouse regarding members with special health care needs. The BA+ list of members is run through the data warehouse looking for a diagnosis if something occurs that is not routine. When a problem is identified, the member is referred to case management for follow-up contacts and services. This report is run for lead case management and cases relating to the Jackson County Consent Decree. The MCO utilizes the State Health Needs Assessment, which is helpful in identifying members who need behavioral health services, and those who are pregnant.

The MCO began using a predictive modeling tool, Care Advance, to search through data and detect members who are at risk of needing care management services. Data used by the MCO included claims, pharmacy utilization, laboratory results, and self-reported information. When this process is fully operational follow-up contact will occur with all at-risk members detected, particularly those with diabetes, heart disease, and COPD. The members will receive prompts to: make medical appointments; identify the need for chronic disease treatment; and to create comparisons to best practice guidelines. The MCO will produce assessments to submit to involved providers. Tutorials for chronic diseases, such as asthma and diabetes are available and providers will be able to use this information, as well as tracking patient information.

The rating for Enrollee Rights and Protections (100.0%) reflects Blue Advantage Plus's ability to have all policy and procedures submitted and approved by the SMA in a timely manner. The MCO also provided evidence of their practice throughout the on-site review process. It appears that the MCO is in compliance with all MC+ Medicaid Managed Care contract regulations and federal requirements.

**Table 87 – Subpart C: Enrollee Rights and Protections Yearly Comparison (Blue-Advantage Plus)**

<b>Federal Regulation</b>	<b>BA+</b>		
	<b>2004</b>	<b>2005</b>	<b>2006</b>
438.100(a) Enrollee Rights: General Rule	2	2	2
438.10(b) Enrollee Rights: Information Requirements	2	2	2
438.10(c)(3) Alternative Language: Prevalent Language	2	2	2
438.10(c)(4,5) Language and Format: Interpreter Services	2	2	2
438.10(d)(1)(i) Information Requirements: Format/Easily Understood	2	2	2
438.10(d)(1)(ii)and (2) Information Requirements: Format Visually Impaired, and Limited Reading Proficiency	2	2	2
438.10(f) Information for All Enrollees: Free Choice, etc.	1	2	2
438.10(g) Information to Enrollees: Specifics/Physician Incentive Plans	2	2	2
438.10(i) Special Rules: Liability for Payment/Cost Sharing	1	2	2
438.100(b)(2)(iii) Enrollee Rights: Provider-Enrollee Communications	2	2	2
438.100(b)(2)(iv,v) Rights to Refuse Services/Advance Directives	2	2	2
438.100(b)(3) Right to Services	2	2	2
438.100(d) Compliance with Other Federal/State Laws	2	2	2
Number Met	11	13	13
Number Partially Met	2	1	0
Number Not Met	0	0	0
Rate Met	84.6%	100%	100%

Note: 0 = Not Met; 1= Partially Met; 2 = Met

Sources: Department of Health and Human Services Centers for Medicare & Medicaid Services (2003). Monitoring Medicaid Managed Care Organizations (MCOs) and Prepaid Inpatient Health Plans (PIHPs): A protocol for determining compliance with Medicaid Managed Care Proposed Regulations at 42 CFR Parts 400, 430, et al. Final Protocol Version 1.0.; BHC, Inc., 2004 External Quality Review Monitoring MCOs Protocols.

### **Behavioral Health**

Interviews occurred at the time of the on-site review with Blue Advantage Plus and administrators from their Behavioral Health Organization (BHO), New Directions Behavioral Health (NDBH). They reported on new programs that occurred during 2006, and responded to questions as follow-up to 2005 issues.

NDBH was asked about accuracy and timelines of claims issues, which was raised as an issue in their annual report. The BHO explained that they had taken steps to improve in this area. They now meet with provider office managers quarterly and all transactions are handled electronically. They have a broad network of providers, but this situation has improved and claims are being submitted and paid in a timely manner after corrective action was implemented.

The BHO reported on 2006 case management activities, such as work with all in-patient facilities to ensure that proper discharge planning occurred for members. This effort assisted in linking members with after-care services, such as those provided by area Community Mental Health Centers (CMHCs). The case management staff maintained a smaller, more manageable caseload that allowed for increased care coordination. New Directions continues to report that co-morbid cases have increased during the past five years. The BHO reported that forty percent of the case management cases are Blue Advantage Plus members, and that forty-one percent of these were identified by emergency room providers.

New Directions Behavioral Health continued to jointly operate the Parents and Children Together (PACT) program with the Gillis Center. The PACT program has been in place for nine years. This program provided intensive interventions for members and their families, with follow-up services within the community. Gillis Center now employs 26 trained therapists for this program. The BHO estimates that between twenty and thirty percent of members receiving sub-acute level care are referred for PACT services. PACT provides direct services and assists the family with community resources. For example, the program connected members and their family with their Community Mental Health Clinic (CMHC) for wrap around services or other beneficial interventions. Referrals are also made to Marillac Center for coordination with school programs and residential placement, if this becomes necessary. This service usually lasts only slightly longer than average inpatient treatment stays, and avoids court-involved out-of-home placement. These services, exceptional to the requirements of the MC+

Medicaid Managed Care contract, assisted members leaving in-patient care, and in some cases prevented in-patient care. Providing this type of support mechanism allowed the MCO to increase ambulatory follow-up for members leaving in-patient services at the seven and thirty-day time frames.

NDBH has continued to develop their collaborative efforts with PCPs. They ensure that the PCP is notified immediately if a member enters inpatient treatment. Anytime there is a drug overdose reported, the BHO ensures that the PCP receives notification.

The BHO has developed clinical guidelines that are posted on the website. These are reviewed annually by the BA+ Quality Improvement Team. They have also developed ADHD guidelines for providers and members. These are posted on the website. They have been unable to produce this information at the sixth grade reading level, so are unable to distribute to all MC+ members. However, these are mailed to members any time they are requested.

New Directions reported that they continue the practice of contacting all members presenting to emergency rooms three or more times in a quarter to ensure that any necessary follow-up services were available. Sharing information and reporting on outcomes was closely coordinated with Blue Advantage Plus.

An update was requested on the NDBH depression management program. They reported that previously 4,000 calls were made, reaching about 400 or 70% of BA+ members. Of these 27% did receive new referrals. BA+ now introduces the availability of behavioral health services in their welcome calls, particularly if the risk assessment identifies a problem. The BHO believes they identify 16% of new referrals through this method.

NDBH reported that they experienced a 6-7% readmission rate for members requiring inpatient treatment in 2006. The BHO annual goal is 5%. They initially had a goal of 10% for obtaining transitional appointments for members leaving the hospital setting. In 2006 they achieved the rate of 36% for receipt of these transitional appointments. Another treatment goal for the BHO was a reduction in the overdoses for members who were on prescribed medications. Decreases have been realized. The number in 2004 was 49; in 2005 the number was 26; and it was reduced to 14 in 2006.

The BHO reports that they do not require the use of out-of-network providers on a regular basis. If necessary, follow-up with the out-of-network provider occurs to ensure that all proper credentials are in place, and that the frequency and timeliness of appointments occur per agreement. The volume of member to provider is evaluated along with the assets of the out-of-network provider. When appropriate, NDBH invites the provider to join their network. The BHO added two new providers who know American Sign Language during the past year. The BHO does evaluate volume, geographic area, and special abilities in reviewing and contracting for new providers.

NDBH reported that they are utilizing a person-to-person call method for conducting their member satisfaction survey. Response rates were 11% in 2004, and 71% in 2005. In the 2005 survey, 97% of the responses were from BA+ members. These surveys are now conducted every other year, and will next be performed during 2007.

## **Quality Assessment and Performance Improvement**

### **Access Standards**

Blue Advantage Plus continued to have an extensive provider network available. The MCO reported that having regular access to orthopedic surgeons, neurologists and urologists was difficult. Blue Advantage Plus has set up out-of-network agreements with orthopedic surgeons at Truman Medical Center for hand surgery. Three urologists from the Kansas City area, and one from the Warrensburg area have been added to their network in 2006. Some specialists remain dissatisfied with the MC+ Medicaid Managed Care reimbursement rates. Blue Advantage Plus does utilize specialists from their commercial network and reimburses them at twenty percent over the Medicaid fee schedule. Customer Service staff continued active recruitment efforts for specialty medical providers. Urgent care centers associated with OSCO Drugs and Walgreens are now available to BA+ members as well.

The MCO reported that their relationship with providers continued to improve during 2006. Blue Advantage Plus continues to operate their providers' advisory committee that they utilize for review of internal policies and activities. Physician complaints and member satisfaction surveys were used to trigger corrective actions and educational opportunities with providers. Provider Relations representatives contact any office that is found to be out of compliance with

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the after-hours access requirements. All member complaints regarding lack of after-hours access are forwarded to provider relations. The appropriate representative contacts the provider office and provides educational information to staff. The Blue Advantage Plus requirements are reviewed and coaching is provided about what type of directions for members must be in place. Follow-up continues until all corrective action is in place. The five representatives visit their assigned providers quarterly.

Blue Advantage Plus also reported initiating corrective action with their transportation subcontractor, MTM. A corrective action plan was developed to reduce call abandonment and to improve call response time. These efforts resulted in improvement in services. The MCO has quarterly meetings with MTM to review call information and to provide follow-up on complaints or problems experienced.

Ratings regarding Access Standards regulations (100%) reflect that Blue Advantage Plus submitted all required policy and procedures to the SMA for their approval. During the on-site review all practices observed indicated that the MCO made a concerted effort to ensure that they were compliant with the MC+ Medicaid Managed Care contract requirements and all federal regulations.

**Table 88 – Subpart D: Quality Assessment and Performance Improvement:: Access Standards Yearly Comparison (Blue-Advantage Plus)**

Federal Regulation	BA+		
	2004	2005	2006
438.206(b)(1)(i-v) Availability of Services: Provider Network	2	2	2
438.206 (b) (2) Access to Well Woman Care: Direct Access	1	2	2
438.206(b)(3) Second Opinions	2	2	2
438.206(b)(4) Out of Network Services: Adequate and Timely Coverage	2	2	2
438.206(b)(5) Out of Network Services: Cost Sharing	1	2	2
438.206(c)(1)(i-vi) Timely Access	2	2	2
438.206(c)(2) Provider Services: Cultural Competency	2	2	2
438.208(b) Care Coordination: Primary Care	2	2	2
438.208(c)(1) Care Coordination: Identification	2	2	2
438.208(c)(2) Care Coordination: Assessment	2	2	2
438.208(c)(3) Care Coordination: Treatment Plans	2	2	2
438.208(c)(4) Care Coordination: Direct Access to Specialists	1	2	2
438.210(b) Authorization of Services	2	2	2
438.210(c) Notice of Adverse Action	2	2	2
438.210(d) Timeframes for Decisions, Expedited Authorizations	2	2	2
438.210(e) Compensation of Utilization Management Activities	2	2	2
438.114 Emergency and Post-Stabilization Services	2	2	2
Number Met	14	17	17
Number Partially Met	3	0	0
Number Not Met	0	0	0
Rate Met	82.4%	100%	100%

Note: 0 = Not Met; 1= Partially Met; 2 = Met

Sources: Department of Health and Human Services Centers for Medicare & Medicaid Services (2003). Monitoring Medicaid Managed Care Organizations (MCOs) and Prepaid Inpatient Health Plans (PIHPs): A protocol for determining compliance with Medicaid Managed Care Proposed Regulations at 42 CFR Parts 400, 430, et al. Final Protocol Version 1.0.; BHC, Inc., 2004 External Quality Review Monitoring MCOs Protocols.

### **Structures and Operation Standards**

Blue Advantage Plus provided regular oversight to all subcontractors. The MCO meet with New Directions Behavioral Health, and MTM at regular Delegated Oversight Quality Meetings. They are currently meeting with Doral Dental on a monthly basis to monitor a correction action plan that is in place.

Blue Advantage Plus implemented CareGuide QI software. This tool allowed for more efficient documentation of the Milliman Criteria and has allowed nursing staff to make more informed medical management decisions. Using this tool in collaboration with provider discussions

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allowed for the most appropriate authorization of inpatient services. The Milliman Criteria provided a guide for medical practice. However, the MCO also used specific practice guidelines from American College of Obstetricians and Gynecologists (ACOG) and the Academy of Pediatrics. Practice guidelines are distributed by the Provider Relations Representatives. This group also assesses if the practice guidelines are in place and utilized. All providers were encouraged to recognize best practices and follow nationally accepted guidelines.

The credential policies and procedures were reviewed and found to be compliant with SMA contract requirements and federal regulations. The policies and procedures follow NCQA and URAC standards. The MCO had a continuing corrective action plan with Doral Dental. Doral Dental has a history of sending incomplete audit reports to the credentialing committee for review from 2004 through 2006. The inability of Doral Dental to follow-up successfully on their corrective action plan is the result of lack of stability of in their credentialing department. At the time of the on-site review, Doral Dental was being reviewed monthly for their credentialing standards and practices. The dental provider representative monitors Doral Dental for new providers, and alerts Blue Advantage Plus to assure proper to ensure that proper credentialing completed. Seventy-five percent of the dental providers in the network were credentialed by another entity to provide confidence in their practices. A list of all providers and their credentialing dates is maintained by the MCO to assure that re-credentialing is completed as required.

The Blue Advantage Plus Customer Service operation has continued to improve. Customer representatives offer members options for care, especially after hours. A scripting matrix was added so representatives can look up procedures pertaining to the member's inquiry, and provide adequate information. The system incorporates prompts for staff to insure that language and level of explanation meet member needs. Talking points are highlighted in all links. Cross training of this system occurs with Member and Customer Services so they can provide back up.

Ratings for compliance with Structure and Operation Standards regulations (100%) reflect that Blue Advantage plus has completed all policy and procedural requirements of the SMA. All practice observed during the on-site review supported that the MCO has made every effort to

be compliant with both the MC+ Medicaid Managed Care contract requirements and federal regulations.

**Table 89 – Subpart D: Quality Assessment and Performance Improvement: Structure and Operation Standards Yearly Comparison (Blue-Advantage Plus)**

Federal Regulation	BA+		
	2004	2005	2006
438.214(a,b) Provider Selection: Credentialing/Recredentialing	2	2	2
438.214(c) and 438.12 Provider Selection: Nondiscrimination	2	2	2
438.214(d) Provider Selection: Excluded Providers	2	2	2
438.214(e) Provider Selection: State Requirements	2	2	2
438.226 and 438.56(b)(1-3) Disenrollment: Requirements and limitations	2	2	2
438.56(c) Disenrollment Requested by the Enrollee	2	2	2
438.56(d) Disenrollment: Procedures	2	2	2
438.56(e) Disenrollment: Timeframes	2	2	2
438.228 Grievance System	2	2	2
438.230(a,b) Subcontractual Relationships and Delegation	1	2	2
Number Met	9	10	10
Number Partially Met	1	0	10
Number Not Met	0	0	0
Rate Met	90%	100%	100%

Note: 0 = Not Met; 1= Partially Met; 2 = Met Sources: Department of Health and Human Services Centers for Medicare & Medicaid Services (2003). Monitoring Medicaid Managed Care Organizations (MCOs) and Prepaid Inpatient Health Plans (PIHPs): A protocol for determining compliance with Medicaid Managed Care Proposed Regulations at 42 CFR Parts 400, 430, et al. Final Protocol Version 1.0.; BHC, Inc., 2004 External Quality Review Monitoring MCOs Protocols.

### Measurement and Improvement

Blue Advantage Plus took extra effort to deal with the issue of Fraud and Abuse in 2006. They moved their Special Investigation Unit into Audit Services to assist in facilitating the process of identifying and rectifying fraud and abuse. When fraud and abuse is suspected, the MCO does not renew provider contracts at their next renewal date. Other actions involve education of providers regarding problem areas identified. The professional investigation unit was originally established in 2004, was active during 2005 and 2006, and continues to assist when a suspected problem arises.

The MCO reports that their network includes more than 1600 physicians. They are experiencing fewer complaints each year. Blue Advantage staff believe this is due to the

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longevity of the relationships with most of these providers. The MCO employs a Physicians Advisory Committee and provides information and training prior to making policy and procedural changes. This group assists in communicating necessary changes within the provider community. Physician profiling occurs and incentives are in place through the MCO's Quality Program. Quarterly audits are completed and communicated to all providers.

Blue Advantage Plus was involved in the community-based Kansas City Quality Improvement Consortium. The group developed clinical practice guidelines for diabetes and asthma. The group has also completed obesity guidelines. The MCO continued to encourage all providers to use practice guidelines accepted by national organizations, as well as those based on local standards. The MCO used the Providers Office Guide and MCO newsletters to disseminate information about practice guidelines to the provider community.

Blue Advantage Plus submitted all required information to complete the Validation of Performance Measures, as requested. The MCO continued to operate a health information system within the guidelines of that protocol. All encounter data requested was provided in the correct format. The details regarding these areas of validation can be reviewed within specific sections of this report.

Ratings for the Measurement and Improvement sections were found to be (100%), which reflects that all required policy and practice meets the requirements of the MC+ Medicaid Managed Care contract and the federal regulations.



**Table 90 – Subpart D: Quality Assessment and Performance Improvement: Measurement and Improvement Yearly Comparison (Blue-Advantage Plus)**

Federal Regulation	BA+		
	2004	2005	2006
438.236(b)(1-4) Practice Guidelines: Adoption	2	2	2
438.236(c) Practice Guidelines: Dissemination	2	2	2
438.236(d) Practice Guidelines: Application	2	2	2
438.240(a)(1) QAPI: General Rules	2	2	2
438.240(b)(1) and 438.240(d) QAPI: Basic Elements of MCO Quality Improvement and PIPs	2	2	2
438.240(b)(2)(c) and 438.204(c) QAPI: Performance Measurement	1	2	2
438.240(b)(3) QAPI: Basic Elements/Over and Under Utilization	2	2	2
438.240(b)(4) QAPI: Basic Elements regarding Special Healthcare Needs	2	2	2
438.240(e) QAPI: Program Review by State	NA	NA	NA
438.242(a) Health Information Systems	2	2	2
438.242(b)(1,2) Health Information Systems: Basic Elements	1	2	2
438.242(b)(3) Health Information Systems: Basic Elements	1	2	2
Number Met	8	11	11
Number Partially Met	3	0	0
Number Not Met	0	0	0
Rate Met	72.7%	100%	100%

Note: Regulation 438.240(e) refers to program review by the state. The regulation requires the state to review, at least annually, the impact and effectiveness of each MCO's quality assessment and performance improvement program. The regulation refers to the state QA & I program review process and is not applicable to External Quality Review of the MC+ Managed Care Program. This percent is calculated for the regulations that are applicable to the MC+ Managed Care Program.

0 = Not Met; 1 = Partially Met; 2 = Met

Sources: Department of Health and Human Services Centers for Medicare & Medicaid Services (2003). Monitoring Medicaid Managed Care Organizations (MCOs) and Prepaid Inpatient Health Plans (PIHPs): A protocol for determining compliance with Medicaid Managed Care Proposed Regulations at 42 CFR Parts 400, 430, et al. Final Protocol Version 1.0.; BHC, Inc., 2004 External Quality Review Monitoring MCOs Protocols.

### Grievance Systems

The Grievance and Appeals system was moved under the umbrella of Blue Advantage Plus to facilitate improved response time to member and provider complaints, grievances and appeals. The MCO reports that this change has had positive results to date.

Four member appeals and two member grievances were evaluated during the on-site review. One appeal was overturned and three were upheld. There was an extension notice sent on two of the appeals, however, these were actually completed within timeframes. Both grievances that were reviewed were handled appropriately, and all correspondence was sent within required timeframes.

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The MCO utilizes a Medical Member Appeal Panel, which is staffed by the Medical Director, two policy holders, and a Blue Advantage Plus representative, who services as a neutral team member. Decisions are made by the panel. If an appeal is not overturned by the panel, the appeal is sent out for review by an independent review organization.

Grievances involving subcontractors are sent to the Quality of Care Committee. When the issue involves a provider, the MCO provider relations staff investigate and then assist in addressing the problem.

Four provider complaints and two grievances were reviewed. All were resolved within the time limits required. Actual complaint and grievance reports indicated appropriate action was taken, however, this summary report did not list outcome resolutions.

Rating for compliance with Grievance System regulations (100%) remained complete as occurred in the 2004 and 2005 reviews. The MCO takes pride in their Grievance and Appeal policy and procedures. All practice witnessed at the time of the on-site review, were in compliance.

**Table 91 – Subpart F: Grievance Systems Yearly Comparison (Blue-Advantage Plus)**

<b>Federal Regulation</b>	<b>BA+</b>		
	<b>2004</b>	<b>2005</b>	<b>2006</b>
438.402(a) Grievance and Appeals: General Requirements	2	2	2
438.402(b)(1) Grievance System: Filing Requirements - Authority	2	2	2
438.402(b)(2) Grievance System: Filing Requirements - Timing	2	2	2
438.402(b)(3) Grievance System: Filing Requirements - Procedures	2	2	2
438.404(a) Grievance System: Notice of Action - Language and Format	2	2	2
438.404(b) Notice of Action: Content	2	2	2
438.404(c) Notice of Action: Timing	2	2	2
438.406(a) Handling of Grievances and Appeals: General Requirements	2	2	2
438.406(b) Handling of Grievance and Appeals: Special Requirements for Appeals	2	2	2
438.408(a) Resolution and Notification: Basic Rule	2	2	2
438.408(b,c) Resolution and Notification: Grievances and Appeals - Timeframes and Extensions	2	2	2
438.408(d)(e) Resolution and Notification: Grievance and Appeals - Format and Content of Notice	2	2	2
438.408(f) Resolution and Notification: Grievances and Appeals - Requirements for State Fair Hearings	2	2	2
438.410 Expedited Resolution of Appeals	2	2	2
438.414 Information about the Grievance System to Providers and Subcontractors	2	2	2
438.416 Recordkeeping and Reporting Requirements	2	2	2
438.420 Continuation of Benefits while Appeal/Fair Hearing Pends	2	2	2
438.424 Effectuation of Reversed Appeal Resolutions	2	2	2
Number Met	18	18	18
Number Partially Met	0	0	0
Number Not Met	0	0	0
Rate Met	100%	100%	100%

Note: 0 = Not Met; 1= Partially Met; 2 = Met

Sources: Department of Health and Human Services Centers for Medicare & Medicaid Services (2003). Monitoring Medicaid Managed Care Organizations (MCOs) and Prepaid Inpatient Health Plans (PIHPs): A protocol for determining compliance with Medicaid Managed Care Proposed Regulations at 42 CFR Parts 400, 430, et al. Final Protocol Version 1.0.; BHC, Inc., 2004 External Quality Review Monitoring MCOs Protocols

## Conclusions

Blue Advantage Plus has excelled in meeting all policy, procedure, and practice areas of compliance with both the MC+ Medicaid Managed Care contract requirements, and the federal regulations. The MCO strengthened their programs, and engaged in a number of initiatives that served to improve the quality, access and timeliness of service to their members. Blue Advantage Plus pointed to their member loyalty as proof of their focus on meeting member needs. The MCO continued to operate, expand, and create initiatives, several in conjunction with the Behavioral Health Organization, that go beyond the strict requirements of their

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contract. These initiatives focus on prevention in an effort to avoid more intrusive treatment for members. Blue Advantage Plus dedicated resources enabling staff to be responsive and supportive to members by ensuring that their healthcare needs were met in an effective and efficient manner.

## QUALITY OF CARE

The quality of healthcare services produced through Blue Advantage Plus remains high as the result of their commitment to continuing quality improvement. The MCO utilizes advisory groups from the community and of physicians to ensure that they have a sound perspective on methods that work and where improvements are necessary. The MCO subcontracts with New Directions Behavioral Health. Quality services are produced and are reflected in their exceptional initiatives, such as coordination of case management activities, the PACT, and Personal Transition Services (PTS) programs.

## ACCESS TO CARE

Blue Advantage Plus exhibits their commitment to access to care through their enhanced service initiatives. They have developed new initiatives that improve member services and utilize MCO resources, such as Care Advance, a project that uses MCO data to inform the MCO about member issues. They participate in community activities to ensure that members have the best information on primary care providers and specialists.

## TIMELINESS OF CARE

Blue Advantage Plus demonstrates their commitment to ensure the timeliness of healthcare by the improvement projects they undertake and new initiatives started each year. Examples of these programs include the BA+ Complaint Process, “Race for Resolution,” which is a well constructed and important initiative that improved the MCO’s responsiveness and timelines to both member grievances and appeals, and provider complaints, grievances, and appeals.

## RECOMMENDATIONS

1. Continue development of projects utilizing available resources and data to justify and assist in understanding member service needs.
2. Continue development and use of products, such as CareAdvance, in predictive modeling and supporting empowerment of members to seek appropriate health interventions.
3. Continue efforts to improve behavioral health services, such as monitoring inpatient facilities, completing proactive discharge planning, and aftercare services.

## 11.0 Harmony Health Plan of Missouri

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## III.1 Validation of Performance Measures

### METHODS

This section describes the documents, data, and persons interviewed for the Validation of Performance Measures for Harmony Health Plan of Missouri. Harmony submitted requested documents on January 3, 2007. The EQRO reviewed documentation between January 3, 2007 and May 1, 2007. On-site review time was used to conduct follow-up questions and perform the Information Systems Capabilities Assessment.

### Document Review

The following are the documents reviewed by the EQRO:

- The Baseline Assessment Tool (BAT) submitted by WellCare
- Information Systems Capabilities Assessment (ISCA) submitted by WellCare

### Interviews

The EQRO Project Director, Research Analyst and a Healthcare Information Management consultant from the University of Missouri, Patricia Alafaireet, conducted on-site interviews with Carole Ouimet, Manager Regulatory Affairs on Thursday, July 19, 2007. Follow-up reviews were conducted with the WellCare staff (Harmony's parent company) that is responsible for calculating the HEDIS performance measures. The review of Harmony Health Plan (HHP) focused on HHP's ability to accurately report Medicaid data as required by State and Federal regulation. To fulfill its obligations as a Medicaid contractor, HHP must demonstrate that it has the automated systems, management practices, data control procedures and rate calculation procedures required in place to assure that that data is adequately captured, stored, translated, analyzed, and reported.

## FINDINGS

HHP has well documented IT/IS systems in place which are sufficiently redundant to provide for both accurate data collection and superior data management. Appropriate security measures are in place to guard against accidental data loss and deliberate misappropriation of data.

HHP has data integrity testing established though all its operations. Additionally, HHP does not depend solely on the capacity of its vendors to provide quality data. Data quality testing occurs even when the vendor in question is well established in the industry and has certified its products through a nationally recognized entity.

HHP has demonstrated an awareness of the risks and benefits of single system utilization and has system failure procedures in place, both from the preventative perspective and in terms of timely response to adverse events. It is unlikely that HHP would suffer extensive data loss or interruption of services to members as a function of IT/IS failure.

IT/IS systems fully support correct rate calculation of HEDIS and other indicators. Appropriate data merging protocols appear to be in place to prevent over or under counting of members.

Documentation provided by HHP is generally sufficient to draw conclusion regarding the quality of its data operations. System drawings and other visual materials is especially well done. Some issues to occur in the documentation when materials provided do not directly address questions posed by the reviewer. Some of the issues with the documentation can be directly related to semantic differences between the health care practice world and that of the IT world. Other variances appear to be the result of multiple individuals involved in documentation production. Response to request for additional information could be timelier and more complete.

## STRENGTHS

HHP upper level management appears to be well aware of the characteristics of the IT/IS used by WellCare as well as its strengths and limitations. Such awareness is effectively bolstered by well thought out operational diagramming and the provision of visual media charts and other educational materials.

HHP has a formal membership reconciliation process including procedures to control utilization of multiple ID number by the same member, in place which increases accuracy and reliability of membership data and reporting drawn from that data.

HHP has a strong IS/IT system in the use of a single platform and central processing location for operations across multiple States and plans. While some risk is accrued from a central processing site, data archiving and storage as well as disaster planning appear more than adequate to sustain operations in the event of an unforeseen event.

Utilization of SAS queries (and the level of detail regarding the queries that is provided in the documentation) is gold standard.

### **AREAS FOR IMPROVEMENT**

HHP could consider clearly labeling all portions of documentation provided to auditors (and internal users) with the plan and location whereby the information is obtained. It is sometimes difficult to determine if information in the documentation pertains to all WellCare products or is confined to one plan or state. Additionally, coordination across responders to requests for information and through documentations would assist in eliminating seeming discrepancies in documentation. A specific instance of such a discrepancy lies in the differing documentation regarding the permissibility of members having both a Medicaid and Medicare status.

HHP might improve and better document programmer effectiveness by establishing at least one internally generated benchmark, such as a measure determined from the actual versus estimated programmer effort, especially if this benchmark could be tied to the completeness and quality of both the project requirements and the technical design of the work. Such a bench mark should focus, however, on the quality of the data produced rather than on strictly production metrics such as number of lines of code produced. HHP might also consider a clinical QA process through which they can verify data results accuracy as well as a technical QA team to verify accuracy of the applications themselves.

The quality standard of 95% complete and correct for claims processors may be a bit low and especially since HHP reports that processors are exceeding this goal. However, the practice of sample to claims per claims processor per day for completeness and correctness may not

represent a statistically valid sample, especially given that there is no evidence of randomness of selection. HHP might wish to look at other sampling methodologies.

## 11.2 MCO Compliance with Managed Care Regulations

### METHODS

Harmony Health Plan is a new MC+ MCO that began its operations in the State of Missouri, upon receiving a contract with Division of Medical Services (DMS) on July 1, 2006. A full compliance audit was not conducted on Harmony Health Care, at the request of the SMA, as all policy is not submitted and approved, and procedures continue to be under development. Prior to the site visit, documentation was received and reviewed regarding the MCO's compliance with the State contract. The External Quality Review Organization (EQRO) reviewed contract documents with the staff of the Division of Medical Services (DMS). On-site review time was used to conduct interviews with those who oversee the daily activities of the MCO to ensure that the practices that are in place are within the scope of the contract and are conducted in a manner that meets or exceeds federal regulations.

A detailed protocol (BHC MCO Compliance Review Scoring Form) was not utilized to review the policy compliance with the MCO. It was discussed related to expectations of future reviews. An interview tool was constructed to guide the discussion regarding Harmony Health Plan's current practices and introducing the MCO to the EQR process, as adopted by DMS and put in to operation by the EQRO. Document reviews occurred on-site to validate basic practices and procedures were in place to guide organizational performance.

### Document Review

The Division of Medical Services supplied:

- State of Missouri Contract Compliance Tool (including DMS responses and comments)

The following documents were requested for on-site review:

- Member Handbook
- Provider Handbook
- 2006 Marketing Plan and Materials
- Prior Authorization Time Frames/Policy/Processes
- Policy Tracking Log
- Staff Training Log
- Credentialing Policies and Audit Reports

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- Opt Out Listings
- Grievance Logs (Member and Providers)

Additional documentation made available by Harmony Health Plan included:

- Marketing Plan and Educational Material Development Policy
- 2006 Marketing Materials
- Harmony Care Organizational Chart

## Interviews

Interviews were conducted on-site at Harmony Health Care's Belleville, Illinois offices on July 19, 2007 with the following group:

## Plan Administration

Heather Scalia -- Director, Quality and Utilization Management

Carol Ouimet -- Manager, Regulatory Affairs

Beverly Terveer -- QI Analyst

Jo David -- Quality Manager

Teresa Soria -- Social Service Specialist

## FINDINGS

Harmony Health Plan is a part of WellCare Health Plans, Inc., as a part of a corporate merger that occurred in 2004. Harmony has been providing Medicaid Managed Care Services in states other than Missouri for a number of years. The behavioral health organization providing services at the time of the site visit was Psych Health, a subcontractor. The MC+ MCO reported that another WellCare subsidiary, Harmony Mental Health, would be assuming responsibility for providing behavioral health services on September 1, 2007.

The MC+ MCO reported having 6,200 members at the time of the on-site review. The predominant population is pregnant women, according to Harmony data. The majority of members resided in St. Louis City and County, but there member population was slowly expanding to the adjoining counties. The MC+ MCO has a goal of upgrading their service

delivery system and ensuring that staff and programs provide quality care for their current members. They did not have a goal of expansion.

The MCO reported that they are aware of the need to have culturally diverse staff and providers. They are contracted with Language Access Metro Project (LAMP) for interpreter services. They are able to translate written materials as needed.

Harmony does have an active Obstetrics Program for pregnant women. They send out OB notification forms, conduct direct member outreach, and complete a thorough needs assessment. Home visits occur for members identified as high risk. The MCO makes an immediate referral for behavioral health services when a need is assessed, and also makes referrals for postpartum support.

The MCO has customer service staff that is assigned to their Missouri population. They have back-up staff available from the Illinois and Kentucky programs, which have been trained on the Missouri Medicaid MC+ Managed Care program. Harmony nursing staff, as well as their Pharmacy Director, has met with physicians in Missouri. During these visits they promoted the EPDST program and encouraged the completion of screenings, and assessments to assist in the identification of members with special health care needs. Additional work with providers includes educating them regarding the HEDIS measures, and emergency room utilization. The MCO marketing department is continuing with network development and report that this has been challenging. They have struggled in engaging physicians in the counties outside of St. Louis, but are still competitive there. The SSM Health Care system has contracted with the MCO.

The Harmony network does include Peoples Clinic and Grace Hill, two St. Louis Federally Qualified Health Centers (FQHCs). The MCO regards their relationship with the FQHCs as vital to ensuring adequate access to care for members. The provider representatives conduct monthly visits to the FQHCs to maintain this resource.

The MCO provides on-call triage through Nurse Line. The triage case manager is located in Texas. A nurse returns any call received within twenty minutes. Behavioral health services also have a call-back system in place. This service is still developing and their goal is to have a professional available as calls are received in the near future.

The case management team is located at the MCO facility in Tampa, Florida. Case management includes lead, special health care needs, and intensive case management. Members receive case management at their request or if referred by a provider, hospital staff, or from the information listing received from the SMA.

The MCO has a medical director, Anthony Pelezzo, MD, assigned to their project. He was not interviewed at the on-site review. He does serve on Harmony's credentialing committee, and reviews all physician applications. The MCO does have a Medical Advisory Committee in place. It is composed of physicians from the Missouri market. They review utilization issues, and make recommendations regarding development of member resources. Practice guidelines are in place and have been adapted for the Missouri MC+ Eastern Region. This information is disseminated through provider newsletters, poster, and pamphlets which are distributed during site visits. Asthma, diabetes, prenatal care, and immunizations are the areas that have been addressed.

The MCO operates a Customer Service/QI Group, which reviews grievances and appeals, enrollment issues, and authorizations. All of these committees report to the Harmony Quality Committee for Missouri and Illinois. The MCO has also embarked on community outreach. They are involved with the Boys and Girls Clubs in their MC+ Region, and operate a birthday club for children in their membership.

## CONCLUSIONS

Harmony Health Plan is a small but emerging MCO operating in the Eastern MC+ Region. The staff is able to articulate their MCO goals and the requirements for service delivery associated with the SMA contract and the federal guidelines. Through involvement in other Medicaid Managed Care markets, the MCO is familiar with the EQR process. They continue to make strides to be in full compliance with both state and federal requirements. The Harmony staff is keenly aware of their responsibility to ensure adequate access to quality healthcare in a timely manner. They realize that obtaining full compliance throughout the MC+ Region they serve is an evolving process, but are able to voice their sincere commitment to achieving their goals.

## RECOMMENDATIONS

1. Complete and submit all required policy for approval to the SMA in a timely manner.
2. Continue efforts in the areas of network development and community relation building.
3. Provide oversight to the transition of behavioral health services to a new provider to ensure that members maintain provider relationships, and continue to receive the services required.

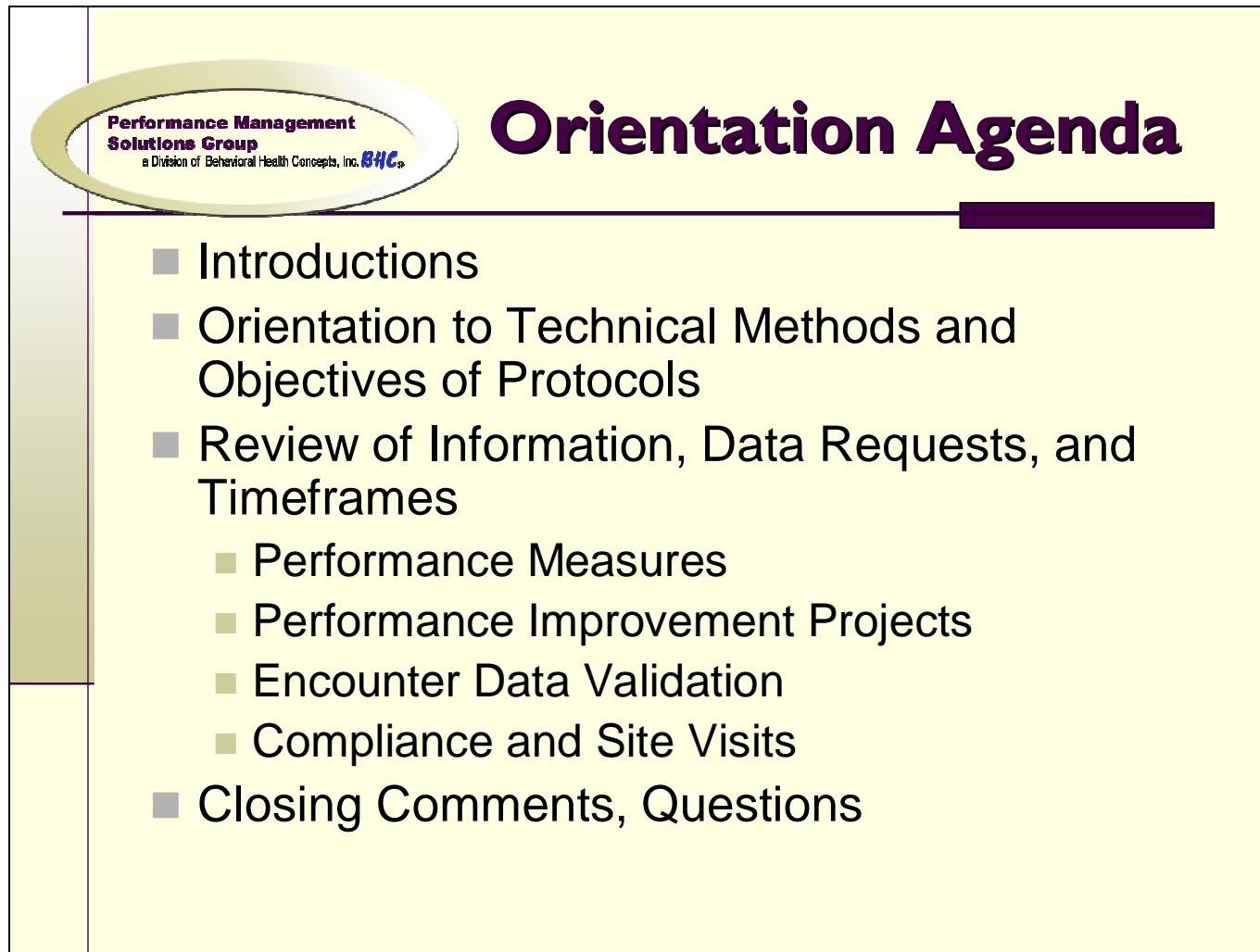
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## Appendices

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**Appendix I – MCO Orientation PowerPoint Slides**



The slide features a light yellow background with a dark blue horizontal bar at the top. On the left side, there is a vertical bar divided into two sections: a darker blue section at the top and a lighter blue section below it. In the upper left corner, there is a circular logo containing the text "Performance Management Solutions Group" and "a Division of Behavioral Health Concepts, Inc. BHC". To the right of the logo, the word "Orientation" is written in a large, bold, dark blue font. Below "Orientation", the word "Agenda" is written in a slightly smaller, bold, dark blue font. A dark blue horizontal bar runs across the middle of the slide. To the right of this bar, there is a list of agenda items, each preceded by a dark blue square bullet point.

- Introductions
- Orientation to Technical Methods and Objectives of Protocols
- Review of Information, Data Requests, and Timeframes
  - Performance Measures
  - Performance Improvement Projects
  - Encounter Data Validation
  - Compliance and Site Visits
- Closing Comments, Questions



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# **2006 External Quality Review for the Missouri MC+ Managed Care Program**

**Behavioral Health Concepts, Inc.**  
**Performance Management Solutions Group**  
Amy B. McCurry, Esq., MHSA  
EQRO Project Director



# Materials Provided

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- Objectives and Technical Methods
  - Validation of Performance Measures
  - Validation of Encounter Data
  - Validation of Performance Improvement Projects
  - MCO Compliance
- Requests for information and data
- List of BHC contacts for each protocol
- Presentation

# Overview

- Protocol Activities
- Information and Data Requests
- Contact Persons



# Validation of Performance Measures

- HEDIS 2006 Measure Validation for MC+
  - Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of life
  - Prenatal and Postpartum Care
  - Follow-up after Hospitalization for Mental Health Disorders
- Administrative
- Hybrid method
  - Review up to 30 medical records per measure sampled randomly



## Submission Requirements for PM Validation

For each of the three measures:

- 2006 HEDIS Audit Report
- Baseline Assessment Tool for HEDIS 2006
- BHC EQRO Performance Measure Checklist (Method for Calculating HEDIS Measures; Table 1.xls)
- List of cases for denominator with all HEDIS 2006 data elements specified in the measures
  - Use an appropriate delimiter (e.g., @ for data that may contain commas or quotation marks).
  - Data layout for the files will be provided in the data request, this data layout must be used to ensure validity
  - Listing of fields names and descriptions of fields (i.e., data dictionary)
- List of cases for numerators with all HEDIS 2006 data elements specified in the measures
  - Use an appropriate delimiter (e.g., @ for data that may contain commas or quotation marks).
  - Data layout for the files will be provided in the data request, this data layout must be used to ensure validity
  - Listing of fields names and descriptions of fields (i.e., data dictionary)
- List of cases for which medical records were reviewed, with all HEDIS 2006 data elements specified in the measures
- BHC will request MCOs to gather up to 30 records per measure, based on a random sample, and MCO will send copies
- Sample medical record tools used for hybrid methods for HEDIS 2006 measures and instructions.
- All worksheets, memos, minutes, documentation, policies and communications within the MCO and with HEDIS auditors regarding the calculation of the selected measures
- Policies, procedures, data and information used to produce numerators and denominators
- Policies, procedures, data used to implement sampling
- Policies and procedures for mapping non-standard codes
- Others as needed

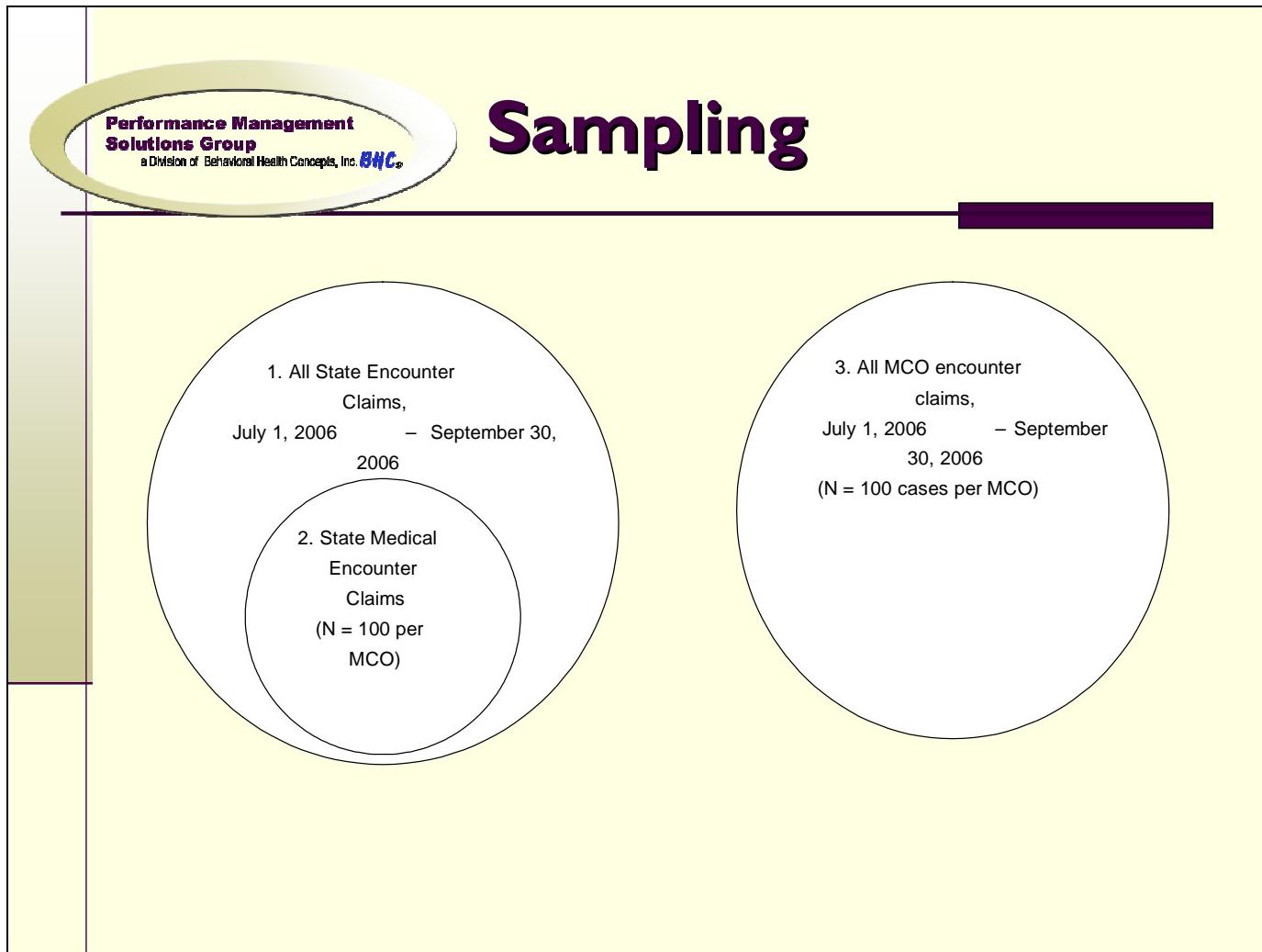
# Validation of Encounter Data

- State encounter claim database
- Randomly selected encounters from medical claims, with service dates July 1, 2006 – September 30, 2006
- Review MCO supplied medical records for matching claims
- Match state and MCO claims databases for all encounters

## Purpose and Objectives

1. To assess the State encounter claim database quality (completeness, accuracy, and reasonableness).
2. To validate the State encounter claims (paid) data against medical record documentation and obtain a fault rate.
3. To examine the match between MCO claims (paid) and the State encounter claims database.

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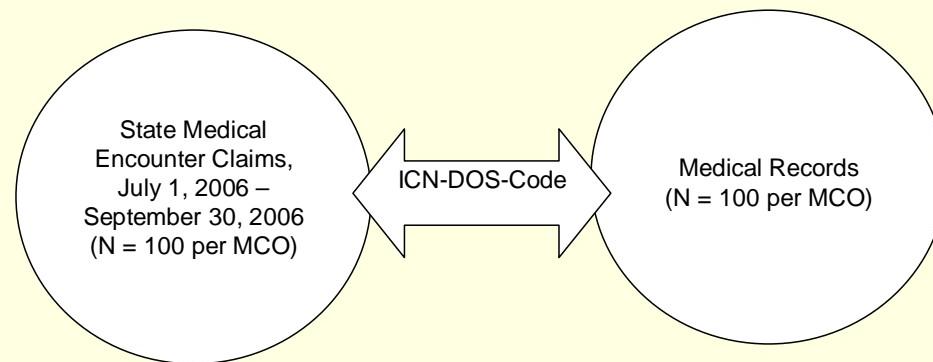
## Analyses: I

Critical fields will be examined for completeness (data in field), accuracy (correct type and length of data), and reasonableness (valid data for field) for each MCO. This will be conducted for all encounters in the specified time frame.



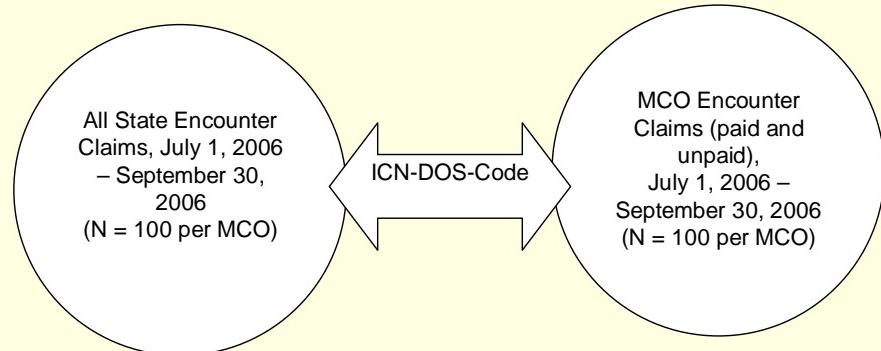
## Analyses: 2

BHC will abstract the medical records and claims history/forms for each patient for the medical service provided during the entire time frame, enter into a database, and determine the rate(s) of matches, omissions and commissions between the medical record and the State encounter claims for each MCO. Matches will be cases that are consistent on patient ICN, date of service, and diagnosis or procedure code.



## Analyses: 3

BHC will determine the rate(s) of matches, omissions and errors between the State encounter claims and MCO encounter claims for each MCO for the sample of selected cases.





# Encounter Data Validation Submission

- File 1: Provider mailing address and contact information for sampled claims (service dates July 1, 2006 to September 30, 2006). This will be used for validation of the State medical encounter claims database against the medical record.
- File 2: All inpatient encounters from July 1, 2006 to September 30, 2006 for selected MC+ members, with detailed provider information. This should be in the layout specified by BHC in the Encounter Data Submission Instructions.
- File 3: All outpatient encounters (Outpatient, Medical, Dental, and Home Health) from July 1, 2006 to September 30, 2006 for selected MC+ members, with detailed provider information. This should be in the layout specified by BHC in the Encounter Data Submission Instructions.
- File 4: All pharmacy encounters from July 1, 2006 to September 30, 2006 for selected MC+ members, with detailed provider information. This should be in the layout specified by BHC in the Encounter Data Submission Instructions.

NOTE: “unpaid claims” are those claims that the MCO denied for payment, unpaid claims do not include claims paid via a capitation plan.





# Medical Record Reviews

- Encounter
  - Encounter sample provided to MCO
  - MCO to develop Files 1 (2 weeks from receipt of sample)
  - MCO to develop Files 2, 3, 4 (6 weeks from receipt of sample)
  - MCO to submit medical record request to providers (1 week from development of File 1)
  - MCOs to ensure providers supply medical records to BHC (4 weeks from submission of request to providers)
- HEDIS
  - Medical record samples requested from MCOs for 2 possible hybrid measures ( $N \leq 30$  per measure; 4 weeks)



## Medical Record Reviews (Cont'd)

- MCO will request and obtain Medical Records from providers
  - Letter from Sandra Levels
  - Instructions for submitting records
  - Encounter claim supporting information, dates, notes, claims information
  - Explanation of Confidentiality, storage of files
  - Explanation of HIPAA, Business Associate Agreement, Health Oversight Authority



## Medical Record Reviews (Cont'd)

- Reviewed and abstracted by experienced and certified medical coders
- Standard abstraction tools
- Matching ICN, Date of Service, Diagnosis Code, Procedure Code

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**Validation of Performance Improvement Projects**

■ Two Performance Improvement Projects underway in 2006

- One clinical
- One non-clinical



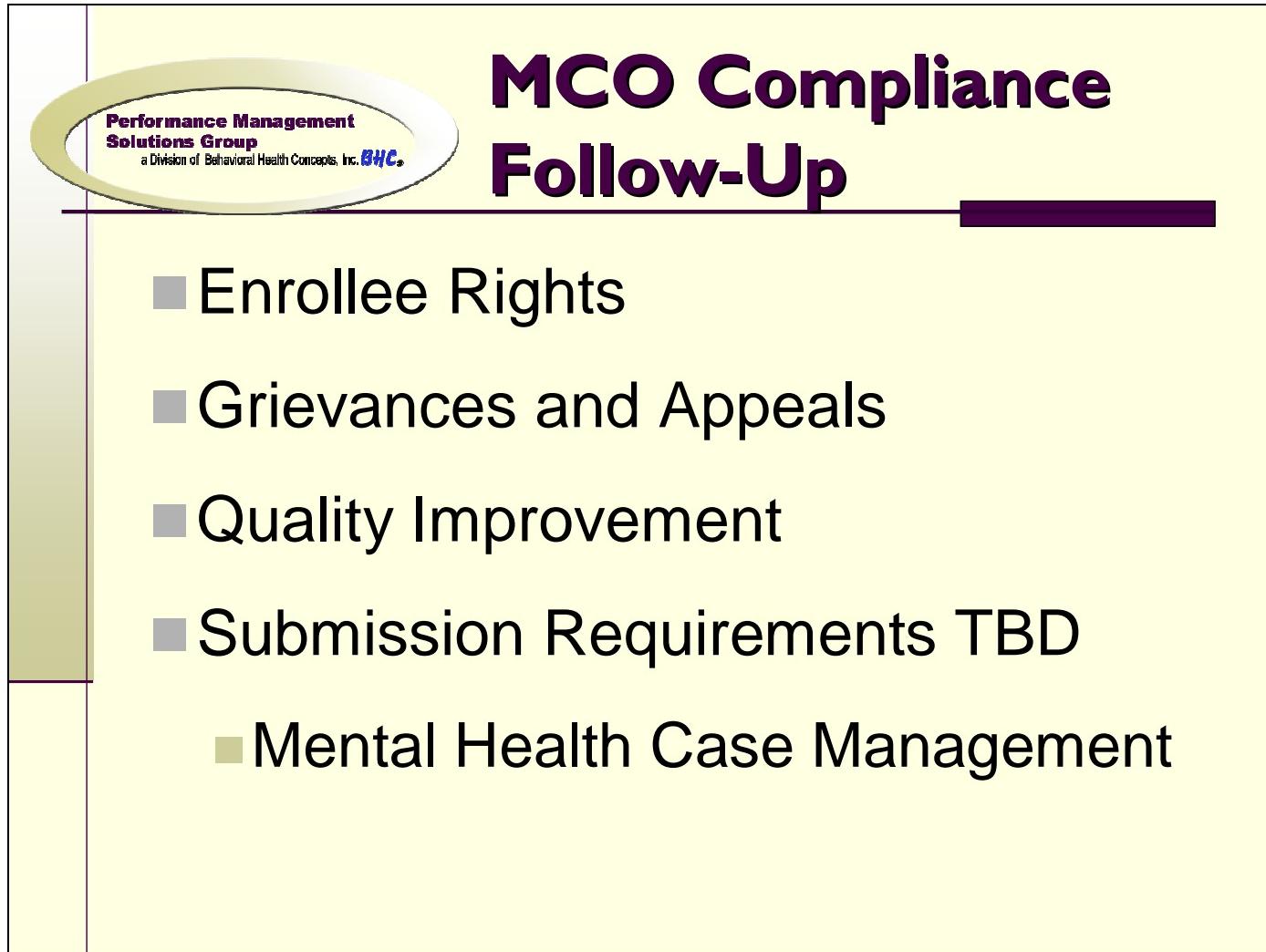
# Validation of Performance Improvement Projects and Submission Requirements

## PIP Checklist Elements

- Project narratives, baseline measures, methods, interventions, and planned analyses.  
Examples of information are contained in the CMS protocol, Validation of Performance Measures<sup>[1]</sup>
- Phase-in/timeframe for each phase of each PIP<sup>[1]</sup>
- Problem identification
- Hypotheses
- Evaluation Questions
- Description of intervention(s)
- Methods of sampling, measurement
- Planned analyses
- Sample tools, measures, surveys, etc.
- Baseline data source and data
- Cover letter with clarifying information
- Raw data files (if applicable, on-site)
- Medical records or other original data sources (if applicable, on-site)
- Additional data as needed

<sup>[1]</sup> U.S. Department of Health and Human Services, Centers for Medicare & Medicaid Services (2002) VALIDATING PERFORMANCE IMPROVEMENT PROJECTS A protocol for use in Conducting Medicaid External Quality Review Activities: Final Protocol Version 1.0 May 1, 2002





The slide features a light yellow background with a dark blue horizontal bar at the top. On the left, there's a white oval containing the text "Performance Management Solutions Group" and "a Division of Behavioral Health Concepts, Inc. BHC". To the right of the oval, the words "MCO Compliance" and "Follow-Up" are written in large, bold, dark blue letters. Below this, a dark blue horizontal bar spans across the slide. The main content area contains five bullet points, each preceded by a dark blue square:

- Enrollee Rights
- Grievances and Appeals
- Quality Improvement
- Submission Requirements TBD
- Mental Health Case Management



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# Site Visits

- Target for July 2006
- MCO Compliance Reviews follow-up
- On-site activities
  - Information Systems Capability Assessments
  - Performance Measure Validation
  - Performance Improvement Project Validation



The slide features a light yellow background with a dark blue horizontal bar at the top. On the left side, there is a decorative graphic consisting of a green vertical bar with a white oval on top containing the text "Performance Management Solutions Group" and "a Division of Behavioral Health Concepts, Inc. BHC". To the right of this graphic, the word "Final Report" is written in large, bold, dark blue capital letters. Below the title, there is a dark blue horizontal bar. The main content area contains a bulleted list under the heading "MCO to MCO Comparisons".

- MCO to MCO Comparisons:
  - Encounter data match/fault rates for diagnoses and procedures
  - Performance Measure audit findings and rates
  - Performance Improvement Project element compliance
  - MCO Compliance follow-up





## BHC Team and Coordination

Protocol/ Activity	BHC Contact	MCO Contact
<b>Performance Measures (HEDIS 2006)</b>	Ms. Amy McCurry Project Director <a href="mailto:amccurry@pmsginfo.com">amccurry@pmsginfo.com</a>	
<b>Performance Improvement Projects</b>	Amy McCurry Project Director <a href="mailto:amccurry@pmsginfo.com">amccurry@pmsginfo.com</a> Ms. Mona Prater Assistant, Project Director <a href="mailto:mprater@pmsginfo.com">mprater@pmsginfo.com</a>	
<b>Encounter Data</b>	Ms. Stephani Worts <a href="mailto:sworts@bhcinfo.com">sworts@bhcinfo.com</a>	
<b>MCO Compliance</b>	Mona Prater <a href="mailto:mprater@pmsginfo.com">mprater@pmsginfo.com</a>	
<b>Site Visits</b>	Amy McCurry <a href="mailto:amccurry@pmsginfo.com">amccurry@pmsginfo.com</a> Mona Prater <a href="mailto:mprater@pmsginfo.com">mprater@pmsginfo.com</a>	
<b>Medical Records</b>	Stephani Worts <a href="mailto:sworts@bhcinfo.com">sworts@bhcinfo.com</a>	

## Appendix 2 – Performance Improvement Project (PIP) Worksheets

Performance Improvement Project Validation Worksheet		
<p>Use this or similar worksheet as a guide when validating MCO/PIHP Performance Improvement Projects. Answer all questions for each activity. Refer to protocol for detailed information on each area.</p>		
ID of evaluator _____	Date of evaluation _____	
Demographic Information		
MCO/PIHP Name or ID _____	Project Leader Name _____	Telephone Number _____
Name of the Performance Improvement Project _____		
Dates of Study _____	Date Study Initiated _____	
Type of Delivery System (check all that apply)		
<input type="checkbox"/> Staff Model	<input type="checkbox"/> Network	<input type="checkbox"/> Director IPA
<input checked="" type="checkbox"/> IPA Organization	<input type="checkbox"/> MCO	<input type="checkbox"/> PIHP
Number of Medicaid Enrollees in MCO or PIHP*	Number Medicare Enrollees in MCO or PIHP	
Number of Medicaid Enrollees in the Study	Total Number of MCO or PIHP Enrollees in Study	
Number of Members in Study	Population of Members in Sample Frame	
Number of MCO/PIHP primary care physicians	Number of MCO/PIHP specialty physicians	
Population of physicians in sample frame	Number of physicians in study	
Note: DK = Don't Know; NA = Not Applicable		
* Source: Missouri Medicaid Management Information System COLD Reports, State Session MPRI Screen, Revised June 25, 2004. Enrollment totals include enrollees with a future start date: 11/3, 19/7/0, and Title XXI enrollees as of June 25, 2004.		



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Activity 1: ASSESS THE STUDY METHODOLOGY					
Step 1. Review the selected study topic(s)					
<b>1.1 The topic was selected through data collection and analysis of comprehensive aspects of enrollee needs, care and services.</b>			<input type="checkbox"/> Met	<input type="checkbox"/> Partially met	<input type="checkbox"/> Not met
			<input type="checkbox"/> Not applicable	<input type="checkbox"/> Unable to determine	
Topic or problem statement					
<b>Clinical</b>					
<input type="checkbox"/> Prevention of an acute or chronic condition			<input type="checkbox"/> High volume services		
<input type="checkbox"/> Care for an acute or chronic condition			<input type="checkbox"/> High risk conditions		
<b>Nonclinical</b>					
<input type="checkbox"/> Process of accessing or delivering care					
Comments					
<b>1.2 MC O's/PIHP's PIPs, over time, addressed a broad spectrum of key aspects of enrollee care and services.</b>			<input type="checkbox"/> Met	<input type="checkbox"/> Partially met	<input type="checkbox"/> Not met
			<input type="checkbox"/> Not applicable	<input type="checkbox"/> Unable to determine	
<b>Project must be clearly focused on identifying and correcting deficiencies in care or services rather than on utilization or cost alone.</b>					
Comments					
<b>1.3 MC O's/PIHP's PIPs over time, included all enrolled populations; i.e., did not exclude certain enrollees such as those with special health care needs.</b>			<input type="checkbox"/> Met	<input type="checkbox"/> Partially met	<input type="checkbox"/> Not met
			<input type="checkbox"/> Not applicable	<input type="checkbox"/> Unable to determine	
Demographic description of MC+ population		Age _____	Gender _____	Payor _____	Race _____
				MC+	Commercial
Comments					



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**Step 2: Review the study question(s)****2.1 Study question(s) stated clearly in writing**

Met       Partially met       Not met  
 Not applicable       Unable to determine

Study question(s) as stated in narrative:

---

Comments:

---

**Step 3: Review selected study indicators(s)****3.1 The study used objective, clearly defined, measurable indicators.**

Met       Partially met       Not met  
 Not applicable       Unable to determine

Indicators (list):

---

Comments:

---

**3.2 The indicators measured changes in health status, functional status or enrollee satisfaction; or process of care with strong association with improved outcomes.**

Met       Partially met       Not met  
 Not applicable       Unable to determine

Long term outcomes implied or stated:

Yes       No

Health status:

Satisfaction (members):

Functional status:

Satisfaction (providers):

Comments:

---



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Step 4: Review the identified study population					
<b>4.1 MCO / PIP clearly defined all Medicaid enrollees to whom the study questions and indicators are relevant.</b>			<input type="checkbox"/> Met	<input type="checkbox"/> Partially met	<input type="checkbox"/> Not met
			<input type="checkbox"/> Not applicable	<input type="checkbox"/> Unable to determine	
Demographic description of MC+ population sampled	Age	Gender	Race	MC+ Commercial	
<b>Did it include:</b>					
1115	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unable to determine	<input type="checkbox"/> NA	
1915b	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unable to determine	<input type="checkbox"/> NA	
Children in state custody	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unable to determine	<input type="checkbox"/> NA	
Consent Decree (Western)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unable to determine	<input type="checkbox"/> NA	
<b>Comments:</b>					
<b>4.2 If the MCO / PIP studied the entire population, did its data collection approach capture all enrollees to whom the study question applied?</b>			<input type="checkbox"/> Met	<input type="checkbox"/> Partially met	<input type="checkbox"/> Not met
			<input type="checkbox"/> Not applicable	<input type="checkbox"/> Unable to determine	
Methods of identifying participants	<input type="checkbox"/> utilization data	<input type="checkbox"/> referral			
	<input type="checkbox"/> self-identification	<input type="checkbox"/> other			
<b>Comments:</b>					
Step 5: Review sampling methods					
<b>5.1 Sampling technique considered and specified the true (or estimated) frequency of occurrence of the event, the confidence interval to be used, and the margin of the error that will be acceptable.</b>			<input type="checkbox"/> Met	<input type="checkbox"/> Partially met	<input type="checkbox"/> Not met
			<input type="checkbox"/> Not applicable	<input type="checkbox"/> Unable to determine	
<b>Previous findings from:</b>					
<input type="checkbox"/> literature review	<input type="checkbox"/> baseline assessment of indices	<input type="checkbox"/> Other			
<b>Comments:</b>					



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**5.2 The MCO / PIHP employed valid sampling techniques that protected against bias.**

Met       Partially met       Not met  
 Not applicable       Unable to determine

The type of sampling used:

- |                                      |   |                                 |                                  |                                     |
|--------------------------------------|---|---------------------------------|----------------------------------|-------------------------------------|
| <input type="checkbox"/> Probability | <input type="checkbox"/> Nonprobability | <input type="checkbox"/> Random | <input type="checkbox"/> Simple  | <input type="checkbox"/> Stratified |
| <input type="checkbox"/> Convenience | <input type="checkbox"/> Judgment       | <input type="checkbox"/> Quota  | <input type="checkbox"/> Cluster |                                     |

Comments

**5.3 Sample contained sufficient number of enrollees.**

Met       Partially met       Not met  
 Not applicable       Unable to determine

N of enrollees in sampling frame \_\_\_\_\_

N of sample \_\_\_\_\_

N of participants (i.e., return rate) \_\_\_\_\_

Comments

**Step 6: Review data collection procedures****6.1 Study design clearly specified the data to be collected.**

Met       Partially met       Not met  
 Not applicable       Unable to determine

Comments



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**6.2 The study design clearly specified the sources of data.**

Not applicable       Unable to determine       No answer

Non-applicable       Unable to determine

Source of data:

Member documents       Claims       Provider       Other \_\_\_\_\_

**6.3 The study design specified a systematic method of collecting valid and reliable data that represents the entire population to which the study's indicators apply.**

Not applicable       Unable to determine       No answer

Non-applicable       Unable to determine

Comments:

**6.4 The instruments for data collection provided for consistent, accurate data collection over the time periods studied.**

Not applicable       Unable to determine       No answer

Non-applicable       Unable to determine

Instrument(s) used:

Survey       Medical Record Abstraction Tool       Other \_\_\_\_\_

Comments:



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**6.5 The study design prospectively specified a data analysis plan.**

Met       Partially met       Not met  
 Not applicable       Unable to determine

Comments \_\_\_\_\_

**6.6 Qualified staff and personnel were used to collect the data.**

Met       Partially met       Not met  
 Not applicable       Unable to determine

Name \_\_\_\_\_ Title \_\_\_\_\_

Role(s) of Project Leader \_\_\_\_\_

Comments \_\_\_\_\_

**Step 7: Assess improvement strategies****7.1 Reasonable interventions were undertaken to address causes/barriers identified through data analysis and QI processes undertaken.**

Met       Partially met       Not met  
 Not applicable       Unable to determine

Describe Intervention: \_\_\_\_\_

Comments \_\_\_\_\_



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**Step 8: Review data analysis and interpretation of study results****N/A if study is not yet complete****8.1 An analysis of the findings was performed according to data analysis plan.**

- Met       Partially met       Not met  
 Not applicable       Unable to determine

**Not met if study is complete and no indication of a data analysis plan (see step 6.5)****Comments:****8.2 The MCO /PIP P presented numerical PIP results and findings accurately and clearly.**

- Met       Partially met       Not met  
 Not applicable       Unable to determine

 Are tables and figures labeled? Labeled clearly, accurately?**Comments:****8.3 The analysis identified initial and repeat measurements, statistical significance, factors that influence comparability of initial and repeat measurement, and factors that threaten internal and external validity.**

- Met       Partially met       Not met  
 Not applicable       Unable to determine

Indicate time periods of measurements:

Indicate statistical analyses used:

Indicate statistical significance level or confidence level used:

 99% 95% Unable to determine**Comments:**

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**8.4 An analysis of study data included an interpretation of the extent to which its PIP was successful and follow-up activities.**

Met     Partially met     Not met  
 Not applicable     Unable to determine

Limitations described:

Conclusions regarding the success of the interpretation:

Recommendations for follow-up:

Comments:

### Step 9: Assess whether improvement is "real" improvement

Note: NA only if study period is not yet complete; otherwise "Unable to Determine" or "N/A"

**9.1 The same methodology as the baseline measurement was used when measurement was repeated.**

Met     Partially met     Not met  
 Not applicable     Unable to determine

Same source of data

Yes     No

Not applicable

Unable to determine

Same method of data collection

Yes     No

Not applicable

Unable to determine

Same participants examined

Yes     No

Not applicable

Unable to determine

Same tools used

Yes     No

Not applicable

Unable to determine

Comments:

**9.2 There was a documented, quantitative improvement in process or outcomes of care.**

Met     Partially met     Not met  
 Not applicable     Unable to determine

increased     decrease

Statistical significance:

Clinical significance:

Comments:



<p><b>9.3 The reported improvements in performance have "face" validity; i.e., the improvement in performance appears to be the result of the planned quality improvement intervention.</b></p> <p>Degree to which the intervention was the reason for change:</p> <p>Comments:</p>		<input type="checkbox"/> Met <input type="checkbox"/> Partially met <input type="checkbox"/> Not met <input type="checkbox"/> Not applicable <input type="checkbox"/> Unable to determine
		<input type="checkbox"/> No relevance <input type="checkbox"/> Small <input type="checkbox"/> Fair <input type="checkbox"/> High
<p><b>9.4 There is statistical evidence that any observed performance improvement is true improvement</b></p> <p>Weak      Moderate      Strong</p> <p>Comments:</p>		
<p><b>Step 10: Assess sustained improvement</b></p> <p><b>10.1 Sustained improvement was demonstrated through repeated measurements over comparable time periods.</b></p> <p>Comments:</p>		
<p><input type="checkbox"/> Met      <input type="checkbox"/> Partially met      <input type="checkbox"/> Not met <input type="checkbox"/> Not applicable      <input type="checkbox"/> Unable to determine</p>		



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**ACTIVITY 3: EVALUATE OVERALL VALIDITY AND RELIABILITY OF STUDY RESULTS: SUMMARY OF AGGREGATE VALIDATION FINDINGS AND RECOMMENDATIONS****Conclusions****Recommendations****Check one:**

- High confidence is reported       Low confidence level is reported in MCO/PIHP PIP results  
 Moderate confidence is reported MCO/PIHP PIP results       Reported MCO/PIHP PIP results not credible  
 Not Applicable, study not complete



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## **Appendix 3 – Performance Measures (PM) Request Documents**

Performance Measure Validation  
General Instructions

**Mail Binder To:**

**Attn: External Quality Review Submission  
Behavioral Health Concepts, Inc.  
2716 Forum Blvd., Suite 4  
Columbia, MO 65203**

**Due Date: January 3, 2007**

When applicable, submit one for each of the three measures:

- Prenatal and Postpartum Care (PPC)
- Follow-Up After Hospitalization for Mental Illness (FUH)
- Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life (W34)

Unless otherwise indicated, please send all documents in hard copy, using the enclosed binder and tabs. If an item is not applicable or not available, please indicate this in the tab.

**Electronic Data Submission Instructions:**

- Data file formats all need to be ASCII, and readable in a Microsoft Windows environment. Please be sure to name data columns with the same variable names that appear in the following data layout descriptions.
- Make all submissions using compact disk (CD) formats. Data files submitted via e-mail will not be reviewed. Insure that files on the CD are accessible on a Microsoft Windows workstation prior to submitting.
- All files or CDs must be password protected. Do not write the password on the CD. Please email the password separately to [amccurry@pmsginfo.com](mailto:amccurry@pmsginfo.com). Do not include the password anywhere on the CD, or in any correspondence sent with the CD.
- Use an appropriate delimiter (e.g., @, tab) for data that may contain commas or quotation marks, and please specify in a readme file or write on the CD what that delimiter is.
- Please ensure that date fields either contain a null value or a valid date.
- Files will be accepted only in the specified layout. Please avoid adding extra columns or renaming the columns we have requested.

**There should be 3 separate files submitted for each measure:**

- File 1. Enrollment Data
- File 2. Denominator and numerator file
- File 3. Sample selection (cases that were selected for medical record review); this file is submitted for *Hybrid measures only*

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**The file layouts to be used for each measure are detailed on pages 2-7 of this document.**

**Please contact BHC prior to the submission deadline if you have any questions regarding these layouts or the data submission requirements, and we will be happy to assist you.**

## Prenatal and Postpartum Care (PPC)

### File 1. Enrollment Data

Please provide all enrollment periods for each eligible MC+ Member to verify continuous enrollment and enrollment gaps.

Field Name	Acceptable Content	Description
MCO	Any basic text and/or numbers	MC+ Managed Care Organization name
MEASURE	PPC	Prenatal and Postpartum Care
DCN	Whole numbers only	The Missouri Medicaid recipient identification number (not the MCOs internal tracking number)
MEMBR_FIRST	Any basic text	MC+ Member First Name
MEMBR_LAST	Any basic text	MC+ Member Last Name
DOB	Numbers only in a correct date format (ex. mm/dd/yyyy)	MC+ Member date of birth
ENROLL_FIRST	Numbers only in a correct date format (ex. mm/dd/yyyy)	First date of enrollment
ENROLL_LAST	Numbers only in a correct date format (ex. mm/dd/yyyy)	Last date of enrollment

### File 2. Denominator and Numerator Data

Field Name	Acceptable Content	Description
MCO	Any basic text and/or numbers	MC+ Managed Care Organization name
MEASURE	PPC	Prenatal and Postpartum Care
DCN	Whole numbers only	The Missouri Medicaid recipient identification number (not the MCOs internal tracking number)
MEMBR_FIRST	Any basic text	MC+ Member First Name
MEMBR_LAST	Any basic text	MC+ Member Last Name
DOB	Numbers only in a correct date format (ex. mm/dd/yyyy)	MC+ Member date of birth
SER_DATE	Numbers only in a correct date format (ex. mm/dd/yyyy)	Date of service
SER_CODE	Any basic text and/or numbers	Code used to identify numerator event
CODING_TYPE	C, D, L, U, or I	Type of coding system: C=CPT Codes; D=DRGs; L=LOINC; U=UB-92 Revenue Codes; I=ICD-9-CM Codes.
DATA_SOURCE	A or MR	For Hybrid Method ONLY Please specify source of data: A = Administrative; MR = Medical Record Review
HYBRID_HIT	Y or N	For Hybrid Method ONLY Hybrid numerator event (positive event "hit"): y=yes; n=no
ADMIN_HIT	Y or N	Administrative numerator event (positive case "hit"): y=yes; n=no
EXCLUD	Y or N	Was the case excluded from denominator Y=Yes; N=No
EXCLUD_REASON	Any basic text and/or numbers	Reason for exclusion

## Prenatal and Postpartum Care (PPC)

**File 3. For Hybrid method ONLY - please provide a listing of the cases selected for medical record review. Use the following layout:**

Field Name	Acceptable Content	Description
MCO	Any basic text and/or numbers	MC+ Managed Care Organization name
MEASURE	PPC	Prenatal and Postpartum Care
DCN	Whole numbers only	The Missouri Medicaid recipient identification number (not the MCOs internal tracking number)
MEMBR_FIRST	Any basic text	MC+ Member First Name
MEMBR_LAST	Any basic text	MC+ Member Last Name
DOB	Numbers only in a correct date format (ex. mm/dd/yyyy)	MC+ Member date of birth
MR_STATUS	R or NR or S	Medical record review status: R = reviewed; NR = not reviewed; S = substituted
PROVIDER_NAME	Any basic text and/or numbers	Primary Care Provider who supplied the record
PROVIDER_ID	Any basic text and/or numbers	Primary Care Provider identification number

## Follow-Up After Hospitalization for Mental Illness (FUH)

### File 1. Enrollment Data

Please provide all enrollment periods for each eligible MC+ Member to verify continuous enrollment and enrollment gaps.

Field Name	Acceptable Content	Description
MCO	Any basic text and/or numbers	MC+ Managed Care Organization name
MEASURE	FUH	Follow-Up After Hospitalization for Mental Illness
DCN	Whole numbers only	The Missouri Medicaid recipient identification number (not the MCOs internal tracking number)
MEMBR_FIRST	Any basic text	MC+ Member First Name
MEMBR_LAST	Any basic text	MC+ Member Last Name
DOB	Numbers only in a correct date format (ex. mm/dd/yyyy)	MC+ Member date of birth
ENROLL_FIRST	Numbers only in a correct date format (ex. mm/dd/yyyy)	First date of enrollment
ENROLL_LAST	Numbers only in a correct date format (ex. mm/dd/yyyy)	Last date of enrollment

### File 2. Denominator and Numerator Data

Field Name	Acceptable Content	Description
MCO	Any basic text and/or numbers	MC+ Managed Care Organization name
MEASURE	FUH	Follow-Up After Hospitalization for Mental Illness
DCN	Whole numbers only	The Missouri Medicaid recipient identification number (not the MCOs internal tracking number)
MEMBR_FIRST	Any basic text	MC+ Member First Name
MEMBR_LAST	Any basic text	MC+ Member Last Name
DOB	Numbers only in a correct date format (ex. mm/dd/yyyy)	MC+ Member date of birth
SER_DATE	Numbers only in a correct date format (ex. mm/dd/yyyy)	Date of service
SER_CODE	Any basic text and/or numbers	Code used to identify numerator event
CODING_TYPE	C, D, U, or I	Type of coding system: C=CPT Codes; D=DRGs; U=UB-92 Revenue Codes; I=ICD-9-CM Codes.
ADMIN_HIT	Y or N	Administrative numerator event (positive case "hit"): y=yes; n=no
EXCLUD	Y or N	Was the case excluded from denominator Y=Yes; N=No
EXCLUD_REASON	Any basic text and/or numbers	Reason for exclusion

## Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life (W34)

### File 1. Enrollment Data

Please provide all enrollment periods for each eligible MC+ Member to verify continuous enrollment and enrollment gaps.

Field Name	Acceptable Content	Description
MCO	Any basic text and/or numbers	MC+ Managed Care Organization name
MEASURE	W34	Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life
DCN	Whole numbers only	The Missouri Medicaid recipient identification number (not the MCOs internal tracking number)
MEMBR_FIRST	Any basic text	MC+ Member First Name
MEMBR_LAST	Any basic text	MC+ Member Last Name
DOB	Numbers only in a correct date format (ex. mm/dd/yyyy)	MC+ Member date of birth
ENROLL_FIRST	Numbers only in a correct date format (ex. mm/dd/yyyy)	First date of enrollment
ENROLL_LAST	Numbers only in a correct date format (ex. mm/dd/yyyy)	Last date of enrollment

### File 2. Denominator and Numerator Data

Field Name	Acceptable Content	Description
MCO	Any basic text and/or numbers	MC+ Managed Care Organization name
Measure	W34	Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life
DCN	Whole numbers only	The Missouri Medicaid recipient identification number (not the MCOs internal tracking number)
MEMBR_FIRST	Any basic text	MC+ Member First Name
MEMBR_LAST	Any basic text	MC+ Member Last Name
DOB	Numbers only in a correct date format (ex. mm/dd/yyyy)	MC+ Member date of birth
SER_DATE	Numbers only in a correct date format (ex. mm/dd/yyyy)	Date of service
SER_CODE	Any basic text and/or numbers	Code used to identify numerator event
CODING_TYPE	C or I or M*	Type of coding system: C=CPT Codes; I=ICD-9-CM Codes; M= MCO Internal Code*
DATA_SOURCE	A or MR	<p><u>For Hybrid Method ONLY</u></p> <p>Please specify source of data: A = Administrative; MR = Medical Record Review</p>
HYBRID_HIT	Y or N	<p><u>For Hybrid Method ONLY</u></p> <p>Hybrid numerator event (positive event "hit"): y=yes; n=no</p>
ADMIN_HIT	Y or N	Administrative numerator event (positive case "hit"): y=yes; n=no
NUMERATOR_ID	0 or 1	Please indicate if this case was counted toward: 0 = 0 visits numerator; 1 = 1 visit numerator;

\* Note: If MCO used internal codes, you must also provide codes used and their description in a separate file.

## Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life (W34)

**File 3. For Hybrid method ONLY - please provide a listing of the cases selected for medical record review. Use the following layout:**

Field Name	Acceptable Content	Description
MCO	Any basic text and/or numbers	MC+ Managed Care Organization name
MEASURE	W34	Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life
DCN	Whole numbers only	The Missouri Medicaid recipient identification number (not the MCOs internal tracking number)
MEMBR_FIRST	Any basic text	MC+ Member First Name
MEMBR_LAST	Any basic text	MC+ Member Last Name
DOB	Numbers only in a correct date format (ex. mm/dd/yyyy)	MC+ Member date of birth
MR_STATUS	R or NR or S	Medical record review status: R = reviewed; NR = not reviewed; S = substituted
PROVIDER_NAME	Any basic text and/or numbers	Primary Care Provider who supplied the record
PROVIDER_ID	Any basic text and/or numbers	Primary Care Provider identification number

Please see the Performance Measure Validation Submission Requirements and the Summary of Calculation Methods for Performance Measures.

## 2006 External Quality Review of the MC+ Managed Care Program

### Performance Measure Validation Submission Requirements

**Instructions:** The following listing includes relevant source data for the EQR process. Submit paper print outs or photocopied items in the EQR 2006 binder supplied; use the associated tabs. Within each tab, include information specific for each of the three measures for the MC+ population. Some items may not apply. For example, if you do not use a HEDIS vendor and perform measure calculations on site, then you may not have documentation on electronic record transmissions. These items apply to processes, personnel, procedures, databases and documentation relevant to how the MCO complies with HEDIS measure calculation, submission and reporting.

If you have any questions about this request, contact Amy McCurry Schwartz, EQRO Project Director,  
[amccurry@pmsginfo.com](mailto:amccurry@pmsginfo.com).

<b>Key</b>	
Check submitted	Use this field to indicate whether you have submitted this information. If you are not submitting the particular information, please indicate "NA". You may have submitted the content by other means either on the BAT or as part of some other documentation. If so, indicate "submitted", and reference the document (see below).
Name of Source Document	Please write the name of the document you are submitting for the item. If you are submitting pages from a procedure manual, indicate so by writing "HEDIS submission manual, pages xx – xx."
MCO Comments	Use this space to write out any concerns you may have or any clarification that addresses any issues or concerns you may have regarding either the items requested or what you submitted in the response.
Reviewed By (BHC use)	This space will be for BHC staff use. The purpose will be for tracking what is received and what is not received. It will not indicate whether the documents actually address the specific issue.

Tab	HEDIS Performance Measure	Check if Submitted or NA	Name of Source Document	MCO Comments	Reviewed by (BHC use)
1.	HEDIS 2006 Data Submission Tool (MO DHSS 2006 Table B HEDIS Data Submission Tool) for all three measures for the MC+ Managed Care Population only. <u>Do not include</u> other measures or populations.				
2.	2006 HEDIS Audit Report. This is the HEDIS Performance Audit Report for the MC+ Managed Care Program product line and the three MC+ measures to be validated (complete report). If the three measures to be validated were not audited or if they were not audited for the MC+ Managed Care Program population, please send the report, as it contains Information Systems Capability Assessment information that can be used as part of the Protocol.				
3.	Baseline Assessment Tool (BAT) for HEDIS 2006. The information submitted for the BAT will include descriptions of the process for calculating measures for the MC+ Managed Care Program population.				
4.	List of cases for denominator with all HEDIS 2006 data elements specified in the measures.				

<b>Tab</b>	<b>HEDIS Performance Measure</b>	<b>Check if Submitted or NA</b>	<b>Name of Source Document</b>	<b>MCO Comments</b>	<b>Reviewed by (BHC use)</b>
5.	List of cases for numerators with all HEDIS 2006 data elements specified in the measures, including fields for claims data and MOHSAIC, or other administrative data used. Please note that one of the review elements in the Protocol is: The “MCO/PIHP has retained copies of files or databases used for performance measure reporting, in the event that results need to be reproduced.”				
6.	List of cases for which medical records were reviewed, with all HEDIS 2006 data elements specified in the measures. Based on a random sample, BHC will request MCOs to gather a maximum of 30 records per measure and submit copies of the records requested to BHC.				
7.	Sample medical record tools used if hybrid method(s) were utilized for HEDIS 2006 Prenatal and Postpartum Care, Follow-Up After Hospitalization, or Well-Child Visits measures for the MC+ Managed Care Program population; and instructions for reviewers.				
8.	All worksheets, memos, minutes, documentation, policies and communications within the MCO and with HEDIS auditors regarding the calculation of the selected measures.				

<b>Tab</b>	<b>HEDIS Performance Measure</b>	<b>Check if Submitted or NA</b>	<b>Name of Source Document</b>	<b>MCO Comments</b>	<b>Reviewed by (BHC use)</b>
9.	Policies, procedures, data and information used to produce numerators and denominators.				
10.	Policies, procedures, and data used to implement sampling (if sampling was used). At a minimum, this should include documentation to facilitate evaluation of:  a. Statistical testing of results and any corrections or adjustments made after processing. b. Description of sampling techniques and documentation that assures the reviewer that samples used for baseline and repeat measurements of the performance measures were chosen using the same sampling frame and methodology. c. Documentation of calculation for changes in performance from previous periods (if comparisons were made), including tests of statistical significance.				
11.	Policies and procedures for mapping non-standard codes.				
12.	Record and file formats and descriptions for entry, intermediate, and repository files.				

<b>Tab</b>	<b>HEDIS Performance Measure</b>	<b>Check if Submitted or NA</b>	<b>Name of Source Document</b>	<b>MCO Comments</b>	<b>Reviewed by (BHC use)</b>
13.	Electronic transmission procedures documentation. (This will apply if the MCO sends or receives data electronically from vendors performing the HEDIS abstractions, calculations or data entry.)				
14.	Descriptive documentation for data entry, transfer, and manipulation of programs and processes.				
15.	Samples of data from repository and transaction files to assess accuracy and completeness of the transfer process.				
16.	Documentation of proper run controls and of staff review of report runs.				
17.	Documentation of results of statistical tests and any corrections or adjustments to data along with justification for such corrections or adjustments.				

<b>Tab</b>	<b>HEDIS Performance Measure</b>	<b>Check if Submitted or NA</b>	<b>Name of Source Document</b>	<b>MCO Comments</b>	<b>Reviewed by (BHC use)</b>
18.	Documentation of sources of any supporting external data or prior years' data used in reporting.				
19.	Procedures to identify, track, and link member enrollment by product line, product, geographic area, age, sex, member months, and member years.				
20.	Procedures to track individual members through enrollment, disenrollment, and possible re-enrollment.				
21.	Procedures used to link member months to member age.				
22.	Documentation of “frozen” or archived files from which the samples were drawn, and if applicable, documentation of the MCO’s/PIHP’s process to re-draw a sample or obtain necessary replacements.				

<b>Tab</b>	<b>HEDIS Performance Measure</b>	<b>Check if Submitted or NA</b>	<b>Name of Source Document</b>	<b>MCO Comments</b>	<b>Reviewed by (BHC use)</b>
23.	Procedures to capture data that may reside outside the MCO's/PIHP's data sets (e.g. MOHSAC).				
24.	Policies, procedures, and materials that evidence proper training, supervision, and adequate tools for medical record abstraction tasks. (May include training material, checks of inter-rater reliability, etc.)				

<b>Performance Measures to be Calculated for MC+ Members</b>			
<b>METHOD FOR CALCULATING HEDIS 2006 PERFORMANCE MEASURES</b>			
<i>Please complete this form and place in the HEDIS 2006 section of the binder supplied by BHC. Please direct any questions to Amy McCurry Schwartz or Stephani Worts.</i>			
<b>MCO</b>			
<b>Date Completed</b>			
<b>Contact Person</b>			
<b>Phone</b>			
<b>Fax</b>			
<b>NCQA Accredited for MC+ Product (Yes/No)</b>			
<b>Certified HEDIS Software Vendor and Software</b>			
<b>Record Abstraction Vendor</b>			
<b>What was the reporting Date for HEDIS 2006 Measures?</b>			
<b>What was the Audit Designation (Report/No Report/Not Applicable)?</b>			
<b>Was the measure publicly Reported (Yes/No)?</b>			
<b>Did denominator include members who switched MCOs (Yes/No)?</b>			
<b>Did denominator include members who switched product lines (Yes/No)?</b>			
<b>Did the denominator include 1115 Waiver Members (Yes/No)?</b>			
<b>Were proprietary or other codes (HCPC, NDC) used?</b>			
<b>Were exclusions calculated (Yes/No)?</b>			
<b>On what date was the sample drawn?</b>			
<b>Were exclusions calculated (Yes/No)?</b>			
<b>How many medical records were requested?</b>			
<b>How many medical records were received?</b>			
<b>How many medical records were substituted due to errors in sampling?</b>			
<b>How many medical records were substituted due to exclusions being measured?</b>			

## **Appendix 4 – Performance Improvement Project Request Documents**

Performance Improvement Project Validation  
General Instructions

### **Mail All Required Information to:**

**Attn: External Quality Review Submission  
Behavioral Health Concepts, Inc.  
2716 Forum Blvd., Suite 4a  
Columbia, MO 65203**

**Due in BHC Office no later than: 3:00 p.m., March 2, 2007**

Please refer to Performance Improvement Project Validation Submission Requirements and the MCO Performance Improvement Project Summary.

## 2006 External Quality Review of the MC+ Managed Care Program

### Performance Improvement Project Validation Submission Requirements

**Instructions:** The following listing includes relevant source data for the EQR process. Submit paper printouts or photocopied items using the associated tabs for each of the two Performance Improvement Project selected for review from the topics submitted. Please refer to the enclosed MCO Performance Improvement Project Summary. Place information behind the associated cover sheet and complete the form below. You may also mark PIP sections if desired. Use the separate cover sheets and summary sheets for each PIP.

If you have any questions about this request, contact Amy McCurry Schwartz, EQRO Project Director,  
[amccurry@pmsginfo.com](mailto:amccurry@pmsginfo.com).

<b>Key</b>	
Check submitted	Use this field to indicate whether you have submitted this information. If you are not submitting the particular information, please indicate "NA". You may have submitted the content by other means or as part of some other documentation. If so, indicate "submitted", and reference the document (see below).
Name of Source Document	Please write the name of the document you are submitting for the item. If you are submitting pages from a procedure manual, indicate in writing.
MCO Comments	Use this space to write out any concerns you may have or any clarification that addresses any issues or concerns you may have regarding either the items requested or what you submitted in the response.
Reviewed By (BHC use)	This space will be for BHC staff use. The purpose will be for tracking what is received and what is not received. It will not indicate whether the documents actually address the specific issue.

Name of  
PIP:

Tab		✓ if Submitted or NA	Name of Source Document	MCO Comments	Reviewed by (BHC use)
I.	Cover letter with clarifying information (optional)				
2.	<p>Project narratives, baseline measures, methods, interventions, and planned analyses. Examples of information are contained in the CMS protocols, Validation of Performance Improvement Projects and Conducting Performance Improvement Projects. We will be looking for the following information in the Performance Improvement Project descriptions.</p> <ul style="list-style-type: none"><li>a. Name and date of inception for each project.</li><li>b. Problem identification, including data collection and analysis justifying the chosen topic based on enrollee needs, care and services.</li><li>c. Hypotheses</li><li>d. Study question evaluation</li><li>e. Selected study indicators</li><li>f. Description of intervention(s)</li><li>g. Methods of sampling, measurement</li><li>h. Data collection procedures</li><li>i. Planned analyses</li><li>j. Sample tools, measures, surveys, etc.</li><li>k. Baseline data source and data</li><li>l. Improvement strategies</li></ul>				

	m. Assessment of improvement and sustainability				
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**Note:** BHC may request raw data files, medical records, or additional data.

## Appendix 5 – Performance Measures (PM) Worksheets

Final Performance Measure Validation Worksheet: HEDIS 2006 Prenatal and Postpartum Care			
<i>The percentage of deliveries of live births between November 6 of the year prior to the measurement year and November 5 of the measurement year. For these women, the measure assesses the following facets of prenatal and postpartum care:</i>			
<ul style="list-style-type: none"> <li>• <i>Timeliness of Prenatal Care.</i> The percentage of deliveries that received a prenatal care visit as a member of the MCO in the first trimester or within 42 days of enrollment in the MCO.</li> <li>• <i>Postpartum Care.</i> The percentage of deliveries that had a postpartum visit on or between 21 and 56 days after delivery.</li> </ul>			
Element	Specifications	Rating	Comments
Appropriate and complete measurement plans and programming specifications exist that include data sources, programming logic, and computer source code.			
Eligible Population			
Age	None specified.		
Enrollment	43 days prior to delivery through 56 days after delivery.		
Gap	No allowable gap during the		
Anchor date	Date of delivery.		
Benefit	Medical.		
Event/diagnosis	November 6 of the year prior to the measurement year and November 5 of the measurement year. Women who delivered in a birthing center should be included in this measure. Refer to Tables PPC-A and PPC-B to identify live births.  Multiple births. Women who had two		
Sampling			
Sampling was unbiased.			
Sample treated all measures independently.			
Sample size and replacement methods met specifications.			
Numerator			
Data sources used to calculate the numerator (e.g., member ID, claims files, medical records, provider files, pharmacy records, including those for members who received the services outside the MCOs network) are complete and accurate.			
Calculation of the performance measure adhered to the specification for all components of the numerator of the performance measure.			
Denominator			
Data sources used to calculate the denominator (e.g., claims files, medical records, provider files, pharmacy records) were complete and accurate.			
Reporting			
State specifications for reporting performance measures were followed.			
Estimate of Bias			
What range defines the impact of data incompleteness for this measure?	0 - 5 percentage points		
	> 5 - 10 percentage points		
	> 10 - 20 percentage points		
	> 20 - 40 percentage points		
	> 40 percentage points		
	Unable to determine		
What is the direction of the bias?	Underreporting		
	Overreporting		
Audit Rating			
Fully Compliant = Measure was fully compliant with State specifications. Substantially Compliant = Measure was substantially compliant with State specifications and had only Not Valid = Measure deviated from State specification such that the reported rate was significantly Not Applicable = No MC+ Members qualified Note: 2 = Met; 0 = Not Met			

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<b>Final Performance Measure Validation Worksheet: HEDIS 2006 Follow-up After</b>			
<p><i>The percentage of discharges for members 6 years of age and older who were hospitalized for treatment of selected mental health disorders and who were seen on an ambulatory basis or were in intermediate treatment with a mental health provider.</i></p>			
<b>Element</b>	<b>Specifications</b>	<b>Rating</b>	<b>Comments</b>
<b>Documentation</b>			
Appropriate and complete measurement plans and programming			
<b>Eligible Population</b>			
Age	6 years and older as of the date of discharge		
Enrollment	Date of discharge through 30 days		
Gap	No gaps in enrollment.		
Anchor date	None		
Benefit	Medical and mental health (inpatient and ambulatory)		
Event/diagnosis	Discharged from an inpatient setting of an acute care facility (including acute care psychiatric facilities) with a discharge date occurring on or before December 1 of the measurement year and a principal ICD-9-CM diagnosis code indicating a mental health disorder specified in Table FUH-A. The MCO should not count discharges from nonacute care facilities (e.g., residential care or rehabilitation stays)		
<b>Sampling - Not Applicable to this measure, calculated via Administrative calculation</b>			
<b>Numerator</b>			
Data sources used to calculate the numerator (e.g., member ID,			
Calculation of the performance measure adhered to the			
<b>Denominator</b>			
Data sources used to calculate the denominator (e.g., claims files, medical records, provider files, pharmacy records) were complete and accurate.			
<b>Reporting</b>			
State specifications for reporting performance measures were followed.			
<b>Estimate of Bias</b>			
What range defines the impact of data incompleteness for this measure?	0 - 5 percentage points		
	> 5 - 10 percentage points		
	> 10 - 20 percentage points		
	> 20 - 40 percentage points		
	> 40 percentage points		
	Unable to determine		
What is the direction of the bias?	Underreporting		
	Overreporting		
<b>Audit Rating</b>			
Fully Compliant = Measure was fully compliant with State specifications. Substantially Compliant = Measure was substantially compliant with State specifications and had only Not Valid = Measure deviated from State specification such that the reported rate was significantly Not Applicable = No MC+ Members qualified Note: 2 = Met; 0 = Not Met Not Applicable = No MC+ Members qualified Note: 2 = Met; 0 = Not Met			

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**Final Performance Measure Validation Worksheet: HEDIS 2005 Well-Child Visits in the Third,**

*The percentage of members who were three, four, five or six years of age during the measurement year who received one or more well-child visits with a primary care practitioner during the measurement year.*

Element	Specifications	Rating	Comments
<b>Documentation</b>			
	Appropriate and complete measurement plans and programming specifications exist that include data sources, programming logic, and computer source code.		
<b>Eligible Population</b>			
Age	3–6 years as of December 31 of the measurement year.		
Enrollment	The measurement year.		
Gap	No more than one gap in enrollment of up to 45 days during the		
Anchor date	Enrolled as of December 31 of the		
Benefit	Medical		
Event/diagnosis	None		
<b>Sampling</b>			
Sampling was unbiased.			
Sample treated all measures independently.			
Sample size and replacement methods met specifications.			
<b>Numerator</b>			
claims files, medical records, provider files, pharmacy records, including those for members who received the services outside the MCOs network) are complete and accurate.			
Calculation of the performance measure adhered to the			
Documentation tools used were adequate.			
Integration of administrative and medical record data was			
The results of the medical record review validation substantiate the reported numerator.			
<b>Denominator</b>			
Data sources used to calculate the denominator (e.g., claims files,			
<b>Reporting</b>			
State specifications for reporting performance measures were			
<b>Estimate of Bias</b>			
What range defines the impact of data incompleteness for this measure?	0 - 5 percentage points		
	> 5 - 10 percentage points		
	> 10 - 20 percentage points		
	> 20 - 40 percentage points		
	> 40 percentage points		
	Unable to determine		
What is the direction of the bias?	Underreporting		
	Overreporting		
<b>Audit Rating</b>			
Fully Compliant = Measure was fully compliant with State specifications. Substantially Compliant = Measure was substantially compliant with State specifications and had only Not Valid = Measure deviated from State specification such that the reported rate was significantly Not Applicable = No MC+ Members qualified Note: 2 = Met; 0 = Not Met			

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## Appendix 6 – Encounter Data Minimum Criteria

### Recommended Encounter Data Validation Criteria

Data Element	Expectation	Validity Criteria
Enrollee ID	Should be valid as found in the State's eligibility file.	100% valid
Principal Diagnosis	Well-coded lead-related diagnoses (or well-child visit)	> 90% non-missing and valid codes.
Date of Service	Dates should be evenly distributed across time	If looking at a full year of data 5-7% of the records should be distributed across each month.
Unit of Service (Quantity)	The number should be routinely coded.	98% non-zero <70% should be one if CTP code in range of 99200-99215, 99241-99291
Procedure Code	This is a critical element and should always be coded. Will be assessed only for presence of code except for lead-related codes which will be validated with medical records.	99% present (not zero, blank, 8- or 9-filled). 100% should be valid, State-approved codes. There should be a wide range of procedures with the same frequency as previously encountered.

Source: Medstat (1999). *A Guide for States to Assist in the Collection and Analysis of Medicaid Managed Care Data:: Second Edition*

## Appendix 7 – Encounter Data Request Letter

April 2, 2007

Dear MC+ MCO Encounter Data Validation Contact:

Enclosed please find the Encounter Data Request for the 2006 External Quality Review. This request includes: Encounter Data Validation submission instructions; File layouts for inpatient, outpatient and pharmacy data; and a CD-ROM containing the sample of encounters to be used for encounter data validation. This is not a request for medical records. You will receive a separate request and instructions for medical records on or about May 1, 2007.

Please note that the data requested is due to the BHC, Inc. offices by close of business on Friday, May 4, 2007. Any information not received by that time will be considered non-responsive and will not be evaluated.

If you have any questions about the submission or are in need of further information, please do not hesitate to contact me.

Sincerely,



Amy McCurry Schwartz  
EQRO Project Director

## Encounter Data Validation Submission Instructions

Mail To:

Behavioral Health Concepts, Inc.  
Attn: Amy McCurry Schwartz  
2716 Forum Blvd., Suite 4  
Columbia, MO 65203

Label the package **CONFIDENTIAL**

**Due Date (due in BHC's offices by close of business): Friday, May 4, 2007**

### **General data submission instructions**

Data file formats all need to be ASCII, and readable in Microsoft Windows environment. Use an appropriate delimiter (e.g., @) for data that may contain commas or quotation marks. Ensure that date fields either contain a null value or a valid date. Make all submissions using compact disk (CD) formats and mail it to BHC, Inc. No files will be accepted via e-mail. Ensure that files on the CD are accessible on a Microsoft Windows workstation prior to submitting.

### **Specific data submission instructions**

Please provide documentation for each electronic file being submitted.

## Encounter Data Request

There should be 4 files submitted to BHC:

1. File 1: Mailing address and contact of the provider associated with each Internal Control Number (ICN) for sampled claims (service dates July 1, 2006 to September 30, 2006). Although MC+ Managed Care Organizations will be doing medical record requests, BHC need to have detailed provider information for tracking purposes.
  
2. File 2: All inpatient encounters from July 1, 2006 to September 30, 2006 for selected recipients, with detailed provider information. Please submit file using the following layout.

Field Name	Content Description
ICLAIM_TYPE	Claim type: I = Inpatient
ICLAIM_STATUS	P=Paid U=Unpaid D=Denied
IICN	State assigned Internal Control Number (ICN)
IPAID-AMT	This field indicates the amount of money paid to the hospital for the billed services.
IRECIP-ID	The Missouri Medicaid recipient identification number.
ILAST	Recipient last name
IFIRST	Recipient first name
IACCT_NUM	The recipient's account number used by the doctor's office.
IADMIT_TYPE	Admission Type  The only valid values are:

	<p>1 = Emergency      2 = Urgent      3 = Elective      4 = Newborn      9 = Information Not Available</p>
IADM_DT	The date the recipient was admitted to the hospital. This date cannot exceed the current date.
IDSCH_DT	The date the recipient was discharged from the hospital. If the patient is still in the hospital, the latest date of service that applies to the claim.
IBILL_TYPE	<p>Valid bill type codes are:</p> <p>Inpatient</p> <p>    11x      12x      18x</p> <p>Outpatient</p> <p>    13x      14x      71x (Rural Health)      81x (Hospice)      82x (Hospice)</p> <p>Home Health</p>

	30x 31x 32x 33x 34X 35x 36x 37x  38x  39x
ISTAT	The code that represents the condition under which the recipient was discharged.  01 Home 02 Hospital 03 Skilled Nursing Facility (SNF) 04 Intermediate Care Facility (ICF) 05 Institution (Inst) 06 Home Health Agency (HHA) 07 Left 08 Other

	<p>20 Death</p> <p>30 Still A Patient</p> <p>50 Discharge from Hospice to Home</p> <p>51 Discharge from Hospice to Another Medical Facility</p> <p>62 Discharged/transferred to an inpatient rehabilitation facility (IRF) including rehabilitation distinct part units of a hospital</p> <p>64 Discharged/transferred to a nursing facility certified under Medicaid but not certified under Medicare</p> <p>65 Discharged/transferred to a psychiatric hospital or psychiatric distinct part unit of a hospital</p>
IPROV_NUM	The Health Plan's 9-digit provider number.
IPRIM_DX	The recipient's primary diagnosis. Decimal points are implied.
IDX_2	Second diagnosis. Decimal points are implied.
IDX_3	Third diagnosis. Decimal points are implied.
IDX_4	Fourth diagnosis. Decimal points are implied.
IDX_5	Fifth diagnosis. Decimal points are implied.
IKEY	A code that indicates the patient has other insurance that may or may not be reflected on the claim. Valid values are: 1 = Yes, patient has other insurance. 2 = Yes, patient has other insurance not reflected on this bill. 3 = No, patient does not have other insurance.

IFDT_SVC	The date that the billing period begins.
ILDT_SVC	The date that the billing period ends.
IREVENUE_CD	<p>The three-digit code from 100 to 999 that represents the services that are billed on this particular line item. The combined total number of accommodation and ancillary services billed cannot exceed 28 lines per claim.</p> <p>Accommodation revenue codes range from 10X through 21X. Ancillary revenue codes range from 22X through 99X.</p> <p>NOTE: Emergency Room (rev 450 and 459) and Ambulance (rev 540 to 549) may only be billed as inpatient if the patient is admitted to the hospital.</p>
IUNITS_SVC	The number of days per room rate for both covered and non-covered accommodations (revenue codes 100 through 239). Whole numbers only are accepted for the days.

3. File 3: All outpatient encounters (Outpatient, Medical, Dental, and Home Health) from July 1, 2006 to September 30, 2006 for selected recipients, with detailed provider information. Please submit file using the following layout.

Field Name	Content Description
OCLAIM_TYPE	O=Outpatient M=Medical L=Dental H=Home Health
OCLAIM-STATUS	Claim Type: O, M, L, H P=Paid U=Unpaid D=Denied
OICN	State assigned Internal Control Number (ICN)
OPAID_AMT	Claim Type O, M, L, H This field is informational only and reflects what FFS would pay.
ORECIP_ID	Claim Type: O, M, L, H  The Missouri Medicaid recipient identification number.
OLAST	Claim Type: O, M, L, H  Recipient last name
OFIRST	Claim Type: O, M, L, H  Recipient first name
OACCT_NUM	Claim Type: O, M, L, H The recipient's account number used by the doctor's office. This field may be left blank or used for other purposes, such as the Health Plan Claim Internal Control Number.

<b>OProv_Num</b>	Claim Type: O, M, L, H  The Health Plan's 9 digit provider number.
<b>OPrim_Dx</b>	Claim Type: O, M, L, H  The ICD-9 diagnosis code of the recipient's diagnosis. Any decimal point needed in the diagnosis code is implied and should not be included.
<b>ODX_2</b>	Claim Type: O, M, L, H  Second diagnosis. The ICD-9 diagnosis code of the recipient's diagnosis. Any decimal point needed in the diagnosis code is implied and should not be included.
<b>ODX_3</b>	Claim Type: O, M, L, H  Third diagnosis. The ICD-9 diagnosis code of the recipient's diagnosis. Any decimal point needed in the diagnosis code is implied and should not be included.
<b>ODX_4</b>	Claim Type: O, M, L, H  Fourth diagnosis. The ICD-9 diagnosis code of the recipient's diagnosis. Any decimal point needed in the diagnosis code is implied and should not be included.
<b>ODX_5</b>	Claim Type: O, M, L, H  Fifth diagnosis. The ICD-9 diagnosis code of the recipient's diagnosis. Any decimal point needed in the diagnosis code is implied and should not be included.
<b>O_Key</b>	Claim Type: O, M, L, H  A code that indicates the patient has other insurance that may or may not be reflected on the claim. Valid values are: 0 = No, patient does not have other insurance. 1 = Yes, patient has other insurance. 2 = Yes, patient has other insurance not reflected on this bill.
<b>OFIRSTDT_SVC</b>	Claim Type: O, M, L, H

	This is the first date the service was performed. This date cannot exceed the current date.
OLASTDT_SVC	Claim Type: O, M, L, H This is the last date the service was performed. This date cannot exceed the current date.
OPLACE_SVC	Claim Type: M, L  C-14 PLACE OF SERVICE 03 School 04 Homeless Shelter 05 Indian Health Service Free-Standing Facility 06 Indian Health Service Provider-Based Facility 07 Tribal 638 Free-Standing Facility 08 Tribal 638 Provider-Based Facility 11 Office 12 Home 13 Assisted Living Facility 14 Group Home 15 Mobile Unit 20 Urgent Care Facility 21 Inpatient Hospital 22 Outpatient Hospital 23 Emergency Room - Hospital 24 Ambulatory Surgical Center 25 Birthing Center 26 Military Treatment Facility 31 Skilled Nursing Facility 32 Nursing Facility 33 Custodial Care Facility 34 Hospice 41 Ambulance - Land 42 Ambulance - Air or Water 49 Independent Clinic 50 Federally Qualified Health Center (FQHC) 51 Inpatient Psychiatric Facility

	<p>52 Psychiatric Facility - Partial Hospitalization      53 Community Mental Health Center      54 Intermediate Care Facility/Mentally Retarded      55 Residence Substance Abuse Treatment Facility      56 Psychiatric Residential Treatment Facility      57 Non-Residential Substance Abuse Treatment Facility      60 Mass Immunization Center      61 Comprehensive Inpatient Rehabilitation Facility      62 Comprehensive Outpatient Rehabilitation Facility      65 End Stage Renal Disease Treatment Facility      71 State or Local Public Health Clinic      72 Rural Health Clinic      81 Independent Laboratory      97 Parochial/Private Schools      98 Schools      99 Other Unlisted Facility</p> <p>Claim Type: O, H      Not applicable</p>
OUTPAT-UNITS-SVC	<p>Claim Type: O, M, L, H      The number of units of services performed. Whole numbers only.</p>
ODTL-PROC	<p>Claim Type: M, L, H      The procedure code that represents the service preformed.</p> <p>Claim Type: O      For outpatient claims, a procedure code is required only when the revenue code range for outpatient services is 300 through 319. This revenue code range represents laboratory services. The appropriate CPT procedure code range for laboratory services is 80048 through 89399. All other outpatient services must be designated by revenue code.</p>
ODTL-PROC-MOD-P	<p>Claim Type: O, M, L, H      The 2-digit modifier that applies to the service provided.</p>
ODTL-PROC-MOD-I	<p>Claim Type: O, M, L, H      The 2-digit modifier that applies to the service provided.</p>

ODTL-DIAG-CODE	Claim Type: O, M, L, H The diagnosis code of the recipient's diagnosis. Decimal points are implied.
OREVENUE_CD	Claim Type: O The three digit code from 100 to 999 which represents the services that are billed on this particular line item. A revenue code is required on all Outpatient claims. For those revenue codes representing lab services (300-319), a procedure code must also be submitted.  Claim Type: M, L, H Not applicable

4. File 4: All pharmacy encounters from July 1, 2006 to September 30, 2006 for selected recipients, with detailed provider information. Please submit file using the following layout.

<b>Field Name</b>	<b>Content Description</b>
PH_TRANSACTION-CD	This field shows the number of claims being billed on the record. Valid values are: 01 - 1 Claim 02 - 2 Claims 03 - 3 Claims 04 - 4 Claims (maximum)
PHCLAIM_STATUS	P=Paid U=Unpaid D=Denied
PHICN	State assigned Internal Control Number (ICN)
PH_PROV-NUM	The Health Plan's 9-digit provider number
PH_NABP-NUM	This field will always contain the 7-digit National Association of Boards of Pharmacy (NABP) identification number assigned to the pharmacy. The NABP number must be in the first 7 positions of the 9-digit field (left justified).
PHRECIP_ID	The Missouri Medicaid recipient identification number.
PHKEY	A code that indicates the patient has other insurance that may or may not be reflected on the claim. Valid values are: 0 = No, patient does not have other insurance. 1 = Yes, patient has other insurance. 2 = Yes, patient has other insurance not reflected on this bill.
PH_FIRST-DT-SVC	The dispense date.
PH_LAST	Entire name may be entered. Only the first two letters of the recipient's last name and the first letter of the recipient's first name will be verified against the recipient's Medicaid enrollment records. The plan must send a minimum of two characters for the last name and one character for the first name.

<b>PH_FIRST</b>	Entire name may be entered. Only the first two letters of the recipient's last name and the first letter of the recipient's first name will be verified against the recipient's Medicaid enrollment records. The plan must send a minimum of two characters for the last name and one character for the first name.
<b>PH_PRESCRIP-NUM</b>	The prescription number of the prescription filled or refilled.
<b>PHREFILL-IND</b>	The only valid values are: Original - 00 (zero) Refill - 01-99
<b>PHDRUG-QTY</b>	The metric or non-metric quantity of the drug being dispensed. For example: A quantity of 100 would be 0100.
<b>PHDAYS-SUPPLY</b>	The estimated number of days the dispensed amount represents. A day's supply greater than 365 is invalid.
<b>PHCOMPOUND-IND</b>	An indicator identifying the prescription as a non-compound or as an ingredient of a compound prescription. A value of '0' or '1' is used to indicate non-compound prescriptions or the FIRST ingredient of a compound prescription. A value of '2' is used to indicate any additional ingredients of a compound prescription.
<b>PHARM-DRUG-NDC-CODE</b>	The National Drug Code designated for the drug dispensed. The field is 5-4-2 format no hyphens or spaces
<b>PHPROV-NUM</b>	The Medicaid, DEA number, or name of the prescribing physician. If not available, enter the dispensing pharmacy NABP number unless you are a pharmacy having FQHC status.
<b>PHEPSDT-IND</b>	A code indicating whether or not a drug was dispensed to a recipient under the Early Periodic Screening and Diagnostic Treatment (EPSDT) program. Y = yes

## Appendix 8 – Medical Record Request Letters

### Performance Measures Medical Record Request



*Behavioral Health Concepts, Inc.*  
Victoria Park, 2716 Forum Blvd., Suite 4, Columbia, MO 65203

(573) 446-0405  
(573) 446-1816 (fax)  
(866) 463-6242 (toll-free)  
[www.bhcinfo.com](http://www.bhcinfo.com)

January 24, 2007

**Subject: 2006 External Quality Review Performance Measure Validation Protocol Medical Records Request (hybrid methodology only).**

**Due Date: March 7, 2007**

Dear < ... >

Please find enclosed a CD-ROM containing two files. Each file on the CD contains a listing of the cases related to <MCO Name> HEDIS 2006 Prenatal and Post Partum Care Measure and Well-Child Visits in the Third, Fourth and Fifth Years of Life Measure that have been selected for medical record review.

Behavioral Health Concepts, Inc. (BHC) requests copies of all medical records for these sampled cases. Each medical record supplied should contain all the information that contributed to the numerator for the given HEDIS 2006 Measure. Please forward copies of these medical records to BHC at the address listed above, and mark the package as confidential.

If you have any questions, please contact BHC's External Quality Review team at (573) 446-0405 or via e-mail: [amccurry@bhcinfo.com](mailto:amccurry@bhcinfo.com)

Thank you,

A handwritten signature in black ink, appearing to read "Amy McCurry Schwartz".

Amy McCurry Schwartz  
EQRO Project Director

Encl.:

- I) CD with a sample of cases for medical record review

cc: Ms. Susan Eggen, Assistant Deputy Director, MC+ Managed Care, Missouri Department of Social Services, Division of Medical Services

**Performance Management Solutions Group**



A division of Behavioral Health Concepts, Inc.

525

**Encounter Data Medical Record Request**



*Behavioral Health Concepts, Inc.*

Victoria Park, 2716 Forum Blvd., Suite 4, Columbia, MO 65203

(573) 446-0405

(573) 446-1816 (fax)

(866) 463-6242 (toll-free)

[www.bhcinfo.com](http://www.bhcinfo.com)

May 1, 2007

Dear MC+ MCO Encounter Data Validation Contact:

Enclosed please find the Encounter Data Medical Record Request for the 2006 External Quality Review. This request includes: Encounter Data Validation submission instructions; a CD-ROM containing the sample of encounters to be used for encounter data validation; and a letter from Sandra Levels to be supplied to providers.

Please note that all medical records are due to the BHC, Inc. offices by close of business on Tuesday, June 12, 2007. Any information not received by that time will be considered non-responsive and will not be evaluated.

If you have any questions about the submission or are in need of further information, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Amy McCurry Schwartz".

Amy McCurry Schwartz  
EQR Project Director

## Appendix 9 – Table of Contents for Medical Record Training Manual

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**Appendix 10 – Abstraction Tools**  
**Encounter Data Medical Record Abstraction Tool**

**Patient Name:**

**Patient DCN:**

**Date of Birth:**

**Medical Record Abstraction Tool**

**Abstractor Initials**

m	m	d	d	y	y	y	y

**Date of abstraction**

--	--	--	--	--	--	--	--

**Data entry operator initials**

--

**Start Time**

h	h	m	m
	:		

Examine only the information provided in physician and professional documentation. **DO NOT** use the CMS-1500, any claim forms, or any claim histories.

Medical Record											
Element	Comparison									Match	Error Type
<b>Date of Service</b>										0 = No 1 = Yes	Code only 1, 8, 9, or 0
	m	m	d	d	y	y	y	y			
Missing = 11119999											
Comment (Required if Error Type = Other)											
<b>Primary Diagnosis</b>										0 = No 1 = Yes	Code only 1, 3, 8, 9, or 0
Decimal is implied. Start at left. If only 3 or 4 digits, leave the right spaces blank.											
Missing = 99999											
Comment (Required if Error Type = Other)											
<b>Primary Diagnosis Description</b>										0 = No 1 = Yes	Code only 8, 9, or 0
Comment (Add description from medical record; Required if Error Type = Other)											

**Patient Name:**

**Patient DCN:**

**Date of Birth:**

<b>Element</b>	<b>Code</b>						0 = No 1 = Yes	Code only 1, 3, 8, 9, or 0
<b>Procedure Code</b>								
Decimal is implied. Start at left. If only 3 or 4 digits, leave the right spaces blank.								
Not Enough Information = 22222								
Comment (Required if Error Type = Other)								
<b>Procedure Description</b>								
Comment (Add description from medical record; Required if Error Type = Other)								
<b>Referrals Documented in the Medical Record (check all that apply; only if not related to the claim validated)</b>								
<input type="checkbox"/> None (0) <input type="checkbox"/> Laboratory (1) <input type="checkbox"/> Pharmacy (2) <input type="checkbox"/> Specialist (3) <input type="checkbox"/> Radiology (4) <input type="checkbox"/> Other (5) <input type="checkbox"/> List _____								

**See next page for the procedure code and procedure code description to be validated.**

**Does the medical record documentation adequately support the procedure code and description?**

- Yes (1)
- No (0)

**If no, Reason (check only one):**

Not enough information (e.g., the date of service and information are present, but there is not enough

- information to make a determination) (1)
- Upcoded (2)
- Incorrect (3)
- Missing (9)
- Other (4) \_\_\_\_\_

Comment



**Patient Name:**

**Patient DCN:**

**Date of Birth:**

Examine the CMS-1500 or any claim forms. If there is no claim form or history, code as missing.

Claim Form or History										
Element	Comparison								Match	Error Type
<b>Date of Service</b>									0 = No 1 = Yes	Code only 1, 8, 9, or 0
Missing =11119999	m	m	d	d	y	y	y	y		
Comment (Required if Error Type = Other)										
<b>Primary Diagnosis</b>									0 = No 1 = Yes	Code only 1, 3, 8, 9, or 0
Decimal is implied. Start at left. If only 3 or 4 digits, leave the right spaces blank.										
Missing = 99999										
Comment (Required if Error Type = Other)										
<b>Primary Diagnosis Description</b>									0 = No 1 = Yes	Code only 8, 9, or 0
Comment (Required if Error Type = Other)										
<b>Procedure Code</b>									0 = No 1 = Yes	Code only 1,3,8, 9, or 0
Comment (Required if Error Type = Other)										
<b>Procedure Description</b>									0 = No 1 = Yes	Code only 3,8, 9, or 0
Comment (Required if Error Type = Other)										

**Patient Name:**

**Patient DCN:**

**Date of Birth:**

<b>Prescription or Pharmacy Information</b>										
	0 = No 1 = Yes	Error Type Code only 1, 8, 9, or 0								
Was there a Reference to Prescription found in Medical Record?										
Comment (Required if Error Type = Other)										
<b>Date Dispensed</b>									<b>Match</b>	<b>Error Type</b>
	m	m	d	d	y	y	y	y	0 = No 1 = Yes	Code only 1, 8, 9, or 0
Missing =11119999										
Comment (Required if Error Type = Other)										
<b>Quantity Dispensed</b>									0 = No 1 = Yes	Code only 1, 8, 9, or 0
	Missing =9999									
Comment (Required if Error Type = Other)										
<b>Drug Dispensed</b> <b>NDC Code (or Drug Name if no code avail.)</b>									0 = No 1 = Yes	Code only 1, 8, 9, or 0
	Missing =9999									
Comment (Add Drug Name from medical record; Required if Error Type = Other)										
<b>End Time</b>	h		h		m		m			
	<input type="text"/>	<input type="text"/>	:	<input type="text"/>	<input type="text"/>		<input type="text"/>	<input type="text"/>		

Medical record protocols

Abstraction tool

Need to preprint selected encounters to be validated, with primary diagnosis and CPT code

Need spaces for additional encounters

Record referrals, prescriptions, and lab procedures

Experienced clinical coders

Requests

Docs need to include billing information, i.e., primary diagnosis code, CPT code, etc.

July 1, 2006 to September 30, 2006

All documentation of encounter claim data, to include progress notes, lab sheets, referrals, prescriptions, flow sheets, forms, and dates of services.

Provider identification number, place of service, etc..

Photocopy of claim form

Printout of electronic medical record notes

**Performance Management Solutions Group**

A division of Behavioral Health Concepts, Inc.

**Performance Measures Medical Record Abstraction Tool - PPC**

<b>Prenatal and Postpartum Care (PPC)</b>											
<b>Patient Name</b>											
Last											
First											
	m	m	d	d	y	y	y	y			
<b>Date of Birth:</b> Missing = 11119999											
<b>Provider Name</b>											
Last											
First											
<b>Name of MCO</b> (Check only one)	<input type="checkbox"/> Mercy CarePlus (1) <input type="checkbox"/> HealthCare USA (2) <input type="checkbox"/> Harmony Health Plan (3) <input type="checkbox"/> Missouri Care (4)						<input type="checkbox"/> Family Health Partners (5) <input type="checkbox"/> Blue Advantage Plus (6)				
<b>Abstractor Initials</b>											
<b>Date of abstraction</b>	m	m	d	d	y	y	y	y			
<b>Data entry operator initials</b>											
<b>Start Time</b>	h	h	m	m							
Search the medical record for a Prenatal visit during the calendar year											
<b>Source of Documentation:</b>	<input type="checkbox"/> Medical Record (1) <input type="checkbox"/> Claim Form (2) <input type="checkbox"/> Both (3) <input type="checkbox"/> None (0)										
<b>Date of Live Birth</b>	m	m	d	d	y	y	y	y			
Missing = 11119999											

Prenatal Care Visits to an OB/GYN practitioner or midwife	
<b>Documented Components of Prenatal Care Visit:</b>  (check all that apply)	Basic physical obstetric exam with auscultation for fetal heart tone <input type="checkbox"/> Yes (1) <input type="checkbox"/> No (0)
	Pelvic exam with obstetric observations <input type="checkbox"/> Yes (1) <input type="checkbox"/> No (0)
	Measurement of fundus height <input type="checkbox"/> Yes (1) <input type="checkbox"/> No (0)
<b>Evidence that a Prenatal Care Procedure was performed:</b>  (Check all that apply)	A screening test in the form of an obstetric panel <input type="checkbox"/> Yes (1) <input type="checkbox"/> No (0)
	TORCH antibody panel alone or a rubella antibody test/titler with an Rh incompatibility (ABO/Rh) blood typing <input type="checkbox"/> Yes (1) <input type="checkbox"/> No (0)
	Echography of a pregnant uterus <input type="checkbox"/> Yes (1) <input type="checkbox"/> No (0)
<b>Evidence that a diagnosis of pregnancy has been established:</b>	Documentation of LMP (last menstrual period) <input type="checkbox"/> Yes (1) <input type="checkbox"/> No (0)
	Documentation of EDD (estimated date of delivery) <input type="checkbox"/> Yes (1) <input type="checkbox"/> No (0)
	Documentation of a complete obstetrical history <input type="checkbox"/> Yes (1) <input type="checkbox"/> No (0)
	Documentation of prenatal risk assessment and counseling/education <input type="checkbox"/> Yes (1) <input type="checkbox"/> No (0)

<b>Prenatal Care Visits to a family practitioner or other primary care practitioner</b>	
<b>Documented Components of Prenatal Care Visit:</b>  (Check all that apply)	Basic physical obstetric exam with auscultation for fetal heart tone <input type="checkbox"/> Yes (1) <input type="checkbox"/> No (0)
<b>Evidence that a Prenatal Care Procedure was performed:</b>  (Check all that apply)	Pelvic exam with ob. observations <input type="checkbox"/> Yes (1) <input type="checkbox"/> No (0)
	Measurement of fundus height <input type="checkbox"/> Yes (1) <input type="checkbox"/> No (0)
<b>Evidence that a diagnosis of pregnancy has been established:</b>  (check all that apply)	A screening test in the form of an obstetric panel <input type="checkbox"/> Yes (1) <input type="checkbox"/> No (0)
	TORCH antibody panel alone or a rubella antibody test/titler with an Rh incompatibility (ABO/Rh) blood typing <input type="checkbox"/> Yes (1) <input type="checkbox"/> No (0)
	Echography of a pregnant uterus <input type="checkbox"/> Yes (1) <input type="checkbox"/> No (0)
<b>Notes:</b>	Documentation of LMP (last menstrual period) <input type="checkbox"/> Yes (1) <input type="checkbox"/> No (0)
	Documentation of EDD (estimated date of delivery) <input type="checkbox"/> Yes (1) <input type="checkbox"/> No (0)
	Documentation of a complete obstetrical history <input type="checkbox"/> Yes (1) <input type="checkbox"/> No (0)
	Documentation of prenatal risk assessment and counseling/education <input type="checkbox"/> Yes (1) <input type="checkbox"/> No (0)

**Performance Measures Medical Record Abstraction Tool – W34**

Well-Child (W34) Abstraction Tool												
<b>Patient Name</b> Missing = 11119999												
	Last											
	First											
<b>Date of Birth</b>	m	m	d	d	y	y	y	y				
<b>Provider Name</b>												
	Last											
	First											
<b>Name of MCO</b> (Check only one)	<input type="checkbox"/> Mercy CarePlus (1)						<input type="checkbox"/> Family Health Partners (5)					
	<input type="checkbox"/> HealthCare USA (2)						<input type="checkbox"/> Blue Advantage Plus (6)					
<input type="checkbox"/> Harmony Health Plan (3)						<input type="checkbox"/> Missouri Care (4)						
<b>Abstractor Initials</b>												
<b>Date of abstraction</b>	m	m	d	d	y	y						
<b>Data entry operator initials</b>												
<b>Start Time</b>	h	h	m	m								
			:									

Search the medical record for a well care visit during the calendar year								
<b>Source of Documentation:</b> <input type="checkbox"/> Medical Record (1) <input type="checkbox"/> Claim Form (2) <input type="checkbox"/> Both (3) <input type="checkbox"/> None (0)								
<b>Documented Components of Well Care Visit:</b> (Check all that apply)	Health and Developmental History							
	<input type="checkbox"/> Yes (1) <input type="checkbox"/> No (0)							
	Physical Exam <input type="checkbox"/> Yes (1) <input type="checkbox"/> No (0)							
<b>Date of Well Care Visit</b> Unless ALL components above are checked, code Missing = 11119999	Anticipatory Guidance							
	<input type="checkbox"/> Yes (1) <input type="checkbox"/> No (0)							
	m	m	d	d	y	y	y	y
<b>Procedure Code</b> Missing = 99999 Insufficient Information = 22222 Don't Know = 88888								
					Acceptable Procedure Codes:  99382 99383 99392 99393			
<b>Procedure Code Match</b> <input type="checkbox"/> Yes (1) <input type="checkbox"/> No (0)								
<b>Diagnosis Code</b> Decimal is implied. Start at left. If only 3 or 4 digits, leave the right spaces blank. Missing = 99999 Insufficient Information = 22222 Don't Know = 88888								
					Acceptable Diagnosis Codes:  V20.2      V70.5      V70.9 V70.0      V70.6 V70.3      V70.8			
<b>Diagnosis Code Match</b> <input type="checkbox"/> Yes (1) <input type="checkbox"/> No (0)								
<b>End Time</b> h      h      m      m :								
<b>Notes:</b>								

## **Appendix II – Agenda for Site Visits**

July XX, 2007

### **RE: SITE VISIT AGENDA AND DOCUMENT REVIEW**

Dear \_\_\_\_\_:

We are finalizing plans for the on-site reviews of each MCO. The following information is being provided in an effort to make preparations for the on-site review as efficient as possible for you and your staff. The following information or persons will be needed at the time of the on-site review at <Health Plan Name> on July XX, 2007.

#### **Performance Improvement Projects**

Time is scheduled in the afternoon to conduct follow-up questions, review databases, and provide verbal feedback to the MCO regarding the planning, implementation, and credibility of findings from the Performance Improvement Projects (PIPs). Any staff responsible for planning, conducting, and interpreting the findings of PIPs should be present during this time. The review will be limited to the projects and findings submitted at the end of 2006. Please be prepared to review databases and any data collection forms not originally submitted.

#### **Performance Measure Validation/ ISCA Review**

As you know, BHC is in the process of validating the following three performance measures:

- HEDIS 2006 Follow-Up After Hospitalization for Mental Illness
- HEDIS 2006 Prenatal and Postpartum Care
- HEDIS 2006 Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life

BHC is following the CMS protocol for validating performance measures. The goals for this process are to:

- Evaluate the accuracy of Medicaid performance measure reported by the MCO; and
- Determine the extent to which Medicaid-specific performance measures calculated by the MCO followed specifications established by the Division of Medical Services. These specifications consist of the HEDIS 2006 Technical Specifications.

To complete this process we will review the following documents while on-site:

- **Data Integration and Processes Used to Calculate and Report Performance Measures**
  1. Documentation of the performance measure generating process
  2. Report production logs and run controls
  3. Documentation of computer queries, programming logic, or source code (if available) used to create denominators, numerators and interim data files - for each of the three measures
  4. Code mapping documentation
  5. Documentation of results of statistical tests and any corrections with justification for such changes, if applicable - for each of the three measures
  6. Documentation showing confidence intervals of calculations when sampling methodology used – for each of the three measures
  7. Description of the software specifications or programming languages instructions used to query each database to identify the denominator, and/or software manual
  8. Source code for identifying the eligible population and continuous enrollment calculation – for each of the three measures
  9. Description of the software specification or programming languages used to identify the numerator
  10. Programming logic and/or source code for arithmetic calculation of each measure to ensure adequate matching and linkage among different types of data
- **Sampling Validation**
  1. Description of software used to execute sampling sort of population files
  2. Source code for how samples for hybrid measures were calculated
  3. Policies to maintain files from which the samples are drawn in order to keep population intact in the event that a sample must be re-drawn or replacements made
  4. Documentation that the computer source code or logic matches the specifications set forth for each performance measure, including sample size and exclusion methodology
  5. Documentation of “frozen” or archived files from which the samples were drawn
  6. Documentation assuring that sampling methodology treats all measures independently, and there is no correlation between drawn samples

## Performance Measure Interviews

In addition to the documentation reviews, interviews will be conducted with the person(s) responsible for:

- Overseeing the process of identifying eligible members from MCO data sources for the measures to be validated;
- Programming the extraction of required elements from the MCO data sources for the measures to be validated;
- Integrity checks and processes of verifying the accuracy of data elements for the measures to be validated;
- Overseeing the process of medical record abstraction, training, and data collection for the measures to be validated; and
- Contractor oversight and management of any of the above activities.
- On-site activities may also include, but are not limited to, the following:
  - Demonstration of HEDIS software
  - Demonstration of the process for extracting data from MCO databases
  - Possible data runs for identifying numerator and denominator cases

## Compliance Review

The final activity to prepare for during the on-site visit will be the compliance follow-up review. Documentation review and interviews with Division of Medical Services staff have occurred prior to the on-site visit. This will enable BHC to use the time at the MCO as efficiently as possible. The following information will be needed at the time of the on-site review:

## Compliance Documents

- Member Handbook
- 2006 Marketing Plan and materials
- Prior authorization time frames/policy/processes
- Policy tracking log
- Staff training records
- Credentialing policies and audit reports
- Opt out listings
- Denial logs
- Grievance logs (members and providers)

Attached is a listing of grievance and appeal records, for both members and providers, which will be reviewed during the on-site visit. We are requesting that you have these records available when BHC arrives on-site.

The Behavioral Health case management records to be reviewed during the on-site visit will be requested the morning of the on-site document review. We request that these records be available by noon on the day of the document review.

### **Compliance Interviews**

The attached agenda requests an interview in the morning with the leadership from the MCO. It would be helpful to include the following staff:

- Plan Director
- Medical Director
- Quality Assurance Director
- Provider Services/Provider Relations Director
- Member Services Director
- Utilization Management Director

Interviews are scheduled in the afternoon to discuss mental health services. We request that staff from subcontractors be available during this time period.

Concurrent activities and interviews are scheduled in the morning and the afternoon. If separate conference rooms or meeting space can be arranged, this will make the process much easier to coordinate. Also, the on-site review team will need to order a working lunch on the day of the visit. If lunch facilities are not available, please provide the name and telephone number of a service in your vicinity that can accommodate ordering lunch. Your assistance will be appreciated.

The MCO staff involved in any of the referenced interviews or activities, or anyone identified by the MCO, is welcome to attend the introduction and/or the exit interview.

Again, your assistance in organizing the documents, individuals to be interviewed, and the day's activities is appreciated. If you have questions, or need additional information, please let me know.

Sincerely,

Mona Prater  
Assistant Project Director

Cc: Amy McCurry Schwartz, Esq., Project Director  
Susan Eggen, Division of Medical Services

Attachment:  
On-Site Review Agenda  
Grievance and Appeal Case Review Listing

## Appendix 12 – Compliance Review Scoring Form

2006 BHC MCO Compliance Review Scoring Form										
<p>This document is used to score the number of items met for each regulation by the MCO.</p> <ol style="list-style-type: none"> <li>1. Review all available documents prior to the site visit.</li> <li>2. Follow-up on incomplete items during the site visit.</li> </ol> <p>the extent to which each regulation is met, partially met, or not met.</p> <p>Scores from this form will be used to compare document compliance across all MCOs.</p> <p>0 = Not Met: Compliance with federal regulations could not be validated.</p> <p>1 = Partially Met: MCO practice or documentation indicating compliance was observed, but total compliance could not be validated.</p> <p>2 = Met: Documentation is complete, and on-site review produced evidence that MCO practice met the standard of</p>										
Contract Compliance Tool	Federal Regulation	Description	Comments	2004 Site Visit and Findings	2005 Site Visit and Findings	2004 Rating 0 = Not Met 1 = Partially Met 2 = Met	1 = 0 = Not Met 1 = Partially Met 2 = Met	2005 Rating 0 = Not Met 1 = Partially Met 2 = Met	2006 Rating 0 = Not Met 1 = Partially Met 2 = Met	
<i>Subpart C: Enrollee Rights and Protections</i>										
2.6.1(a)1-25, 1.2.2.6(a), 2.6.2(i)	438.100(a)	Enrollee Rights: General Rule								
2.6.1(a)1, 2.9, 2.6.2(j), 2.6.2(n)	438.10(b)	Enrollee Rights: Basic Rule								
3.2.15.2(e), 2.8.2	438.10(c)(3)	Alternative Language: Prevalent Languages								
2.8.2, 2.8.3, 4.2.6.2(n)(2)	438.10(c)(4,5)	Language and format: Interpreter Services								
5.2.6.1(a)1, 2.6.2(n)1	438.10(d)(1)(i)	Information Requirements: Alternative Formats								
2.6.1(a)1, 2.6.2(n)2 - dot point 35, 2.6.2(q), 6.2.8.2, 2.8.3	438.10(d)(1)(ii)and (2)	Information Requirements: Easily Understood								
2.3.5, 2.6.1(a)3/ 2.6.2(k)1, 2.6.2(n), 7.2.6.2(n)(2), 2.6.2(q)	438.10(f)	Enrollee Rights: Information, Free Choice								
8.2.6.2(n)(2)	438.10 (g)	Information to Enrollees: Physician Incentive Plans								

2.4, 2.4.5, 2.4.5(a)2-9, 4, 2.20.1(all), 3.5.3(f)	438.10(i)	Liability for Payment and Cost Sharing						
2.2.6(a), 2.2.6(b), 2.6.1(a)(3), 2.6.2(j), 2.9.1	438.100(b)(2)(iii)	Specific Enrollee Rights: Provider-Enrollee Communications						
2.6.2(j), 2.30.1, 2.30.2, 2.30.3	438.100(b)(2)(iv,v)	Right to Services, including right of refusal. Advance Directives						
2.6.2(j), 2.4.8, 2.13, 2.14	438.100(b)(3)	Right to Services						
2.2.6, 2.14.3, 2.14.8, 2.14.9	438.100(d)	Compliance with Other State Requirements						
Total Enrollee Rights and Protections								
<i>Subpart D: Quality Assessment and Performance Improvement</i>								
<i>Subpart D: Quality Assessment and Performance Improvement: Access Standards</i>								
2.3.1, 2.6.2(j), 2.14.3, 2.7.1(g), 3.5.3	438.206(b)(1)(i-v)	Availability of Services: Provider Network						
2.7.1(e), 2.7.1(f), 2.14.8	438.206(b)(2)	Access to Well Woman Care: Direct Access						
2.13	438.206(b)(3)	Second Opinions						
2.3.2, 2.3.18, 2.7.1(bb), 2.12.3, 2.12.4, 2.14.5	438.206(b)(4)	Out of Network Services: Adequate and Timely Coverage						
2.4.8(j)	438.206(b)(5)	Out of Network Providers: Cost Sharing						
2.3.14(a)2, 2.14.1,								

## Report of Findings – 2006

## Compliance Review Scoring Form

19	2.14.4(a-f)	438.206(c)(1)(i-vi)	Timely Access					
20	2.2.6(a)1-3, 2.17.1	438.206(c)(2)	Cultural Considerations					
21	2.14.11, 2.3.5(e)	438.208(b)	Primary Care and Coordination of Healthcare Services					
22	2.6.2(m), 2.3.8, 2.5.3(e)	438.208(c)(1)	Care Coordination: Identification					
23	2.12.10, 2.14.2(c), 2.14.11, 2.17.5, Attachment 3 – Children with Special Healthcare Needs	438.208(c)(2)	Care Coordination: Assessment					
24	2.14.11	438.208(c)(3)	Care Coordination: Treatment Plans					
25	2.6.1(k)(3), 2.14.6, 2.14.7	438.208(c)(4)	Access to Specialists					
26	2.2.1(j), 2.3.7, 2.7.4, 2.9.2, 2.10.2, 2.14.1, 2.14.2(a-h), 2.14.2(d)1-2	438.210(b)	Authorization of Services					
27	2.15.4, 2.14.2(d)6	438.210(c)	Notice of Adverse Action					
28	2.6.2(k)(3), 2.14.2(d)6, 2.15.4(a-c), 2.16.3(e)	438.210(d)	Timeframe for Decisions					
29	2.17.5(b)	438.210(e)	Compensation for Utilization Management Decisions					
			Emergency and Post-Admission Decision Making					

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30	2.4.8, 2.14.2(a)	438.114	Stabilization pgs 24/25 Rev. Checklist						
<i>Subpart D: Quality Assessment and Performance Improvement: Structure and Operation Standards</i>									
31	2.17.2(n), 2.17.5@	438.214(a,b)	General Rules for Credentialing and Recredentialing						
32	2.2.6(b)(c)	438.214(c) and 438.12	Nondiscrimination and Provider Discrimination Prohibited						
33	2.31.5	438.214(d)	Excluded Providers						
34	2.3.9, 2.3.17	438.214(e)	Other State Requirements: Provider Selection						
	2.6.2(n)(2),	438.226 and 438.56(b)(1)	Disenrollment: Requirements and						

## Appendix 13 – Behavioral Health Case Management Review Tool



### ***Case Management Record Review***

#### **Documentation of member information –**

1. For this member receiving behavioral health services the case management record contains a treatment plan that is:
  - Appropriate to conditions
  - For a specified period of time
  - Has a standing referral
  - Exhibits coordination of care among providers, particularly the PCP
  - Developed with member participation
  - Ensures periodic reassessment of member's condition
  
2. Member information documented
  - Eligibility (Medicaid eligibility code, date, or other similar information)
  - Benefits
  - Age or DOB

#### **Case Management activities –**

3. Reason for case management indicated (please specify)
  - Yes
  - No

Details available:

4. A PCP and behavioral health provider are identified?

- Yes
- No

5. Results of assessment of care and needs are documented (check all that apply)

- Sources of needs assessment are documented
- Provider medical record
- Provider claims
- Provider authorization
- Caregiver report
- Other
- Not documented
- Not assessed (specific indication of no assessment)

6. A treatment plan or care plan is documented?

- Yes
- No
- Not documented

7. Treatment goals or objectives are defined and measurable?

- Yes
- No
- Not documented

8. Services or utilization are documented?

- Yes: Describe services identified -- \_\_\_\_\_  
\_\_\_\_\_
- No
- Not documented

9. Case Management Activities Documentation

- Patient education
- Provider education
- Referral
- Not documented
- Other \_\_\_\_\_

10. Community-Based Services

- The need for community-base services was explored
- Appropriate referrals were made
- Not documented

Details available:

11. Coordination of care occurred

- PCP informed
- Other related providers informed
- Not documented

Details available:

12. Disposition of case

- Follow-up in \_\_\_\_\_ weeks
- Follow-up in \_\_\_\_\_ months
- Close case
- Not documented
- Other \_\_\_\_\_

12. Did the case management activities match the needs and goals described? Did the goals match the member's needs?

13. Strengths:

13. Opportunities for improvement:

**Appendix 14 – Site Visit Information Request Letter***Behavioral Health Concepts, Inc.*

Victoria Park, 2716 Forum Blvd., Suite 4, Columbia, MO 65203

(573) 446-0405  
(573) 446-1816 (fax)  
(866) 463-6242 (toll-free)  
[www.bhcinfo.com](http://www.bhcinfo.com)

June 26, 2007

**RE: SITE VISIT AGENDA AND DOCUMENT REVIEW**

Dear < ... >:

We are finalizing plans for the on-site reviews of each MCO. The following information is being provided in an effort to make preparations for the on-site review as efficient as possible for you and your staff. The following information or persons will be needed at the time of the on-site review at Blue Advantage Plus on August 1, 2007. Due to the case reading and document review requirements, Myrna Bruning and I will visit your office on July 31, 2007 beginning at 1:30 pm. We will only require the listed documentation, the case records for Behavioral Health Case Management, and the Grievance and Appeal files requested to be available that afternoon, as well as a place to conduct this review.

**Performance Improvement Projects**

Time is scheduled in the afternoon to conduct follow-up questions, review databases, and provide verbal feedback to the MCO regarding the planning, implementation, and credibility of findings from the Performance Improvement Projects (PIPs). Any staff responsible for planning, conducting, and interpreting the findings of PIPs should be present during this time. The review will be limited to the projects and findings submitted at the end of 2006. Please be prepared to review databases and any data collection forms not originally submitted.

**Performance Measure Validation/ ISCA Review**

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- HEDIS 2006 Follow-Up After Hospitalization for Mental Illness
- HEDIS 2006 Prenatal and Postpartum Care
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- Evaluate the accuracy of Medicaid performance measure reported by the MCO; and
- Determine the extent to which Medicaid-specific performance measures calculated by the MCO followed specifications established by the Division of Medical Services. These specifications consist of the HEDIS 2006 Technical Specifications.

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To complete this process we will review the following documents while on-site:

### **Data Integration and Processes Used to Calculate and Report Performance Measures**

1. Documentation of the performance measure generating process
2. Report production logs and run controls
3. Documentation of computer queries, programming logic, or source code (if available) used to create denominators, numerators and interim data files - for each of the three measures
4. Code mapping documentation
5. Documentation of results of statistical tests and any corrections with justification for such changes, if applicable - for each of the three measures
6. Documentation showing confidence intervals of calculations when sampling methodology used – for each of the three measures
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9. Description of the software specification or programming languages used to identify the numerator
10. Programming logic and/or source code for arithmetic calculation of each measure to ensure adequate matching and linkage among different types of data

### **Sampling Validation**

1. Description of software used to execute sampling sort of population files
2. Source code for how samples for hybrid measures were calculated
3. Policies to maintain files from which the samples are drawn in order to keep population intact in the event that a sample must be re-drawn or replacements made
4. Documentation that the computer source code or logic matches the specifications set forth for each performance measure, including sample size and exclusion methodology
5. Documentation of “frozen” or archived files from which the samples were drawn
6. Documentation assuring that sampling methodology treats all measures independently, and there is no correlation between drawn samples

### **Performance Measure Interviews**

In addition to the documentation reviews, interviews will be conducted with the person(s) responsible for:

- Overseeing the process of identifying eligible members from MCO data sources for the measures to be validated;
- Programming the extraction of required elements from the MCO data sources for the measures to be validated;
- Integrity checks and processes of verifying the accuracy of data elements for the measures to be validated;
- Overseeing the process of medical record abstraction, training, and data collection for the measures to be validated; and
- Contractor oversight and management of any of the above activities.

On-site activities may also include, but are not limited to, the following:

- Demonstration of HEDIS software
- Demonstration of the process for extracting data from MCO databases
- Possible data runs for identifying numerator and denominator cases

### **Compliance Review**

The final activity to prepare for during the on-site visit will be the compliance follow-up review. Documentation review and interviews with Division of Medical Services staff have occurred prior to the on-site visit. This will enable BHC to use the time at the MCO as efficiently as possible. The following information will be needed at the time of the on-site review:

### **Compliance Documents**

- Member Handbook
- 2006 Marketing Plan and materials
- Prior authorization time frames/policy/processes
- Policy tracking log
- Staff training records – particularly on grievances/appeals
- Credentialing policies and audit reports
- Opt out listings
- Denial logs
- Grievance logs (members and providers)

A listing of grievance and appeal records, for both members and providers, which will be reviewed during the on-site visit, will be sent prior to July 31, 2007 to ensure their availability. We are requesting that you have these records available when BHC arrives on-site.

The Behavioral Health case management records to be reviewed during the on-site visit will be requested the morning of the on-site document review. We request that these records be available by 1:30 pm on the day of the document review.

### **Compliance Interviews**

The attached agenda requests an interview in the morning with the leadership from the MCO. It would be helpful to include the following staff:

- Plan Director
- Medical Director
- Quality Assurance Director
- Provider Services/Provider Relations Director
- Member Services Director
- Utilization Management Director

Interviews are scheduled in the afternoon to discuss mental health services. We request that staff from subcontractors be available during this time period.

Concurrent activities and interviews are scheduled in the morning and the afternoon. If separate conference rooms or meeting space can be arranged, this will make the process much easier to

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550

coordinate. Also, the on-site review team will need to order a working lunch on the day of the visit. If lunch facilities are not available, please provide the name and telephone number of a service in your vicinity that can accommodate ordering lunch. Your assistance will be appreciated.

The MCO staff involved in any of the referenced interviews or activities, or anyone identified by the MCO, is welcome to attend the introduction and/or the exit interview.

Again, your assistance in organizing the documents, individuals to be interviewed, and the day's activities is appreciated. If you have questions, or need additional information, please let me know.

Sincerely,

Mona Prater  
Assistant Project Director

Cc: Amy McCurry Schwartz, Esq., Project Director  
Susan Eggen, Division of Medical Services

Attachment:  
On-Site Review Agenda